



This is a digital copy of a book that was preserved for generations on library shelves before it was carefully scanned by Google as part of a project to make the world's books discoverable online.

It has survived long enough for the copyright to expire and the book to enter the public domain. A public domain book is one that was never subject to copyright or whose legal copyright term has expired. Whether a book is in the public domain may vary country to country. Public domain books are our gateways to the past, representing a wealth of history, culture and knowledge that's often difficult to discover.

Marks, notations and other marginalia present in the original volume will appear in this file - a reminder of this book's long journey from the publisher to a library and finally to you.

Usage guidelines

Google is proud to partner with libraries to digitize public domain materials and make them widely accessible. Public domain books belong to the public and we are merely their custodians. Nevertheless, this work is expensive, so in order to keep providing this resource, we have taken steps to prevent abuse by commercial parties, including placing technical restrictions on automated querying.

We also ask that you:

- + *Make non-commercial use of the files* We designed Google Book Search for use by individuals, and we request that you use these files for personal, non-commercial purposes.
- + *Refrain from automated querying* Do not send automated queries of any sort to Google's system: If you are conducting research on machine translation, optical character recognition or other areas where access to a large amount of text is helpful, please contact us. We encourage the use of public domain materials for these purposes and may be able to help.
- + *Maintain attribution* The Google "watermark" you see on each file is essential for informing people about this project and helping them find additional materials through Google Book Search. Please do not remove it.
- + *Keep it legal* Whatever your use, remember that you are responsible for ensuring that what you are doing is legal. Do not assume that just because we believe a book is in the public domain for users in the United States, that the work is also in the public domain for users in other countries. Whether a book is still in copyright varies from country to country, and we can't offer guidance on whether any specific use of any specific book is allowed. Please do not assume that a book's appearance in Google Book Search means it can be used in any manner anywhere in the world. Copyright infringement liability can be quite severe.

About Google Book Search

Google's mission is to organize the world's information and to make it universally accessible and useful. Google Book Search helps readers discover the world's books while helping authors and publishers reach new audiences. You can search through the full text of this book on the web at <http://books.google.com/>

HD WIDENER



Hw T6Z9 2



LIVES OF
POOR BOYS
WHO BECAME
FAMOUS

H 1153 · 85 · 3

**HARVARD COLLEGE
LIBRARY**



**TRANSFERRED
FROM THE
GRADUATE SCHOOL
OF
BUSINESS ADMINISTRATION**





**LIVES OF POOR BOYS
WHO BECAME FAMOUS**

By the Same Author:

**LIVES OF GIRLS WHO BECAME
FAMOUS**

Biographical sketches of Harriet Beecher Stowe, George Eliot, Helen Hunt Jackson, Harriet Hosmer, Rosa Bonheur, Florence Nightingale, Maria Mitchell, Helen Keller, and other eminent women. Illustrated with portraits.

"The charm of Mrs. Bolton's books lies in the easy, conversational naturalness with which the reader is led from page to page. Solid information and pleasant entertainment are blended enjoyably. Young people in hundreds of homes will read such books with interest, and be the better for them."—*The Congregationalist*.

**THOMAS Y. CROWELL CO.
NEW YORK**





© 1900, by McClure, Phillips & Co.

LINCOLN STUDYING BY THE FIRELIGHT

LIVES OF POOR BOYS
WHO BECAME FAMOUS

BY

SARAH K. BOLTON

Author of "Lives of Girls Who Became Famous"

REVISED AND ENLARGED EDITION

ILLUSTRATED



NEW YORK
THOMAS Y. CROWELL COMPANY
PUBLISHERS

H 1158.85.3

HARVARD COLLEGE LIBRARY
RECEIVED THROUGH THE
GRADUATE SCHOOL OF
BUSINESS ADMINISTRATION

OCT. 30, 1924

COPYRIGHT, 1885,
BY THOMAS Y. CROWELL & CO.

COPYRIGHT, 1918,
BY SARAH K. BOLTON

COPYRIGHT, 1922,
BY THOMAS Y. CROWELL COMPANY



Richard G. ...

PUBLISHERS' NOTE

THE fact that there is constant inspiration in Mrs. Bolton's stories of "Poor Boys Who Became Famous" is reason enough for her book's continued success. Since it first appeared in 1885, it has been many times reprinted. The present text has been revised and entirely reset, and considerable new material added. It now contains some thirty-five of these life stories, choosing typical examples from many lands and trades. Here are potters, painters, mechanics, inventors, composers, musicians, preachers; soldiers, statesmen, explorers,—each following the course of his ambition *per aspera ad astra*.

Another secret of the author's success is her ability to pick out the salient points of each career and present them so clearly that we seem to see the actual person. Viewed as a whole the book is a cross-section of human society, with special emphasis upon "the boy who had no chance."

PREFACE TO FIRST EDITION

THESE characters have been chosen from various countries and from varied professions, that the youth who read this book may see that poverty is no barrier to success. It usually develops ambition, and nerves people to action. Life at best has much of struggle, and we need to be cheered and stimulated by the careers of those who have overcome obstacles.

If Lincoln, a farmer-boy, could come to the Presidency, then there is a chance for other farmer-boys. If Ezra Cornell, a mechanic, could become the president of great telegraph companies, and leave millions to a university, then other mechanics can come to fame. These lives show that without WORK and WILL no great things are achieved.

I have selected several characters because they were the centres of important historical epochs. With Garibaldi is necessarily told the story of Italian unity; with Garrison and Greeley, the fall of slavery; and with Lincoln and Sheridan, the battles of our Civil War.

S. K. B.

CONTENTS

	PAGE
BERNARD PALISSY <i>Potter</i>	I
CAROLUS LINNAEUS <i>Scientist</i>	9
SAMUEL JOHNSON <i>Author</i>	17
BENJAMIN FRANKLIN <i>Statesman</i>	23
OLIVER GOLDSMITH <i>Author</i>	34
JAMES WATT <i>Inventor</i>	39
WOLFGANG MOZART <i>Composer</i>	49
JEAN PAUL RICHTER <i>Author</i>	57
JOSEPH MARIE JACQUARD <i>Weaver</i>	71
BERTEL THORWALDSEN <i>Sculptor</i>	78
PETER COOPER <i>Educator</i>	84
MICHAEL FARADAY <i>Scientist</i>	94
GEORGE STEPHENSON <i>Inventor</i>	106
GEORGE PEABODY <i>Merchant</i>	114
SIR JOSIAH MASON <i>Manufacturer</i>	124
WILLIAM LLOYD GARRISON <i>Reformer</i>	130
DAVID G. FARRAGUT <i>Naval Commander</i>	143
THOMAS COLE <i>Painter</i>	158
EZRA CORNELL <i>Mechanic</i>	169
GUISEPPE GARIBALDI <i>Patriot</i>	179
ABRAHAM LINCOLN <i>Statesman</i>	191
OLE BULL <i>Violinist</i>	210

CONTENTS

	PAGE
JEAN LOUIS MEISSONIER . <i>Painter</i>	225
HORACE GREELEY <i>Editor</i>	233
SIR HENRY BESSEMER . . . <i>Manufacturer</i>	246
ULYSSES S. GRANT <i>Soldier</i>	256
JAMES B. EADS <i>Engineer</i>	267
BAYARD TAYLOR <i>Author</i>	273
PHILIP HENRY SHERIDAN . <i>Soldier</i>	284
DWIGHT L. MOODY <i>Evangelist</i>	299
LEON GAMBETTA <i>Statesman</i>	314
JOHN D. ROCKEFELLER . . <i>Merchant</i>	325
ANDREW CARNEGIE <i>Manufacturer</i>	334
HENRY M. STANLEY <i>Explorer</i>	346
THOMAS A. EDISON <i>Inventor</i>	360

LIVES OF POOR BOYS WHO BECAME FAMOUS

BERNARD PALISSY

IN the Louvre in Paris, preserved among almost priceless gems, are several pieces of exquisite pottery called Palissy ware. Thousands examine them every year, yet but few know the struggles of the man who made them.

Born in the south of France in 1509, in a poor, plain home, Bernard Palissy grew to boyhood, sunny-hearted and hopeful, learning the trade of painting on glass from his father. He had an ardent love for nature, and sketched rocks, birds, and flowers with his boyish hands. When he was eighteen, he grew eager to see the world, and, with a tearful good-bye from his mother, started out to seek his fortune. For ten years he travelled from town to town, now painting on glass for some rich lord, or sketching for a peasant family in return for food.

Finally, like other young people, he fell in love, and was married at twenty-eight. He could not travel about the country now, so he settled in the little town of Saintes. Then a baby came into their humble home. How could he earn more money, since the poor people about him had no need for painted glass?

About this time he was shown an elegant enamelled cup from Italy. "What if I could be the first and only maker of such ware in France?" thought he. But he had no knowledge of clay, and no money to visit Italy, where alone the secret could be obtained.

The Italians began making such pottery about the year 1300. Two centuries earlier, the pagan King of Majorca, in the Mediterranean Sea, was said to keep confined in his dungeons twenty thousand Christians. The Archbishop of Pisa, incited his subjects to make war upon such an infidel king, and after a year's struggle, the Pisans took the island, killed the ruler, and brought home his heir, and great booty. Among the spoils were exquisite Moorish plates, which were so greatly admired that they were hung on the walls of Italian churches. At length the people learned to imitate this Majolica ware, which brought very high prices.

The more Palissy thought about this beautiful pottery, the more determined he became to attempt its making. But he was like a man groping in the dark. He had no knowledge of what composed the enamel on the ware; but he purchased some drugs, and ground them to powder. Then he bought earthen pots, broke them in pieces, spread the powder upon the fragments, and put them in a furnace to bake. He could ill afford to build a furnace, or even to buy the earthenware; but he comforted his young wife with the thought that as soon as he had discovered what would produce white enamel they would become rich.

When the pots had been heated sufficiently, as he supposed, he took them out, but, lo! the experiment had availed nothing. Either he had not hit upon the right ingredients, or the baking had been too long or too short in time. He must of course try again. For days and weeks he pounded and ground new materials; but no success came. The weeks grew into months. Finally his supply of wood became exhausted, and the wife was losing her patience with these whims of an inventor. They were poor, and needed present income rather than future prospects. She had ceased to believe Palissy's stories of riches coming from white enamel. Had she known that

she was marrying an inventor, she might well have hesitated, lest she starve in the days of experimenting; but now it was too late.

His wood used up, Palissy was obliged to make arrangements with a potter who lived three miles away, to burn the broken pieces in his furnace. His enthusiasm made others hopeful; so that the promise to pay when white enamel was discovered was readily accepted. To make matters sure of success at this trial, he sent between three and four hundred pieces of earthenware to his neighbor's furnace. Some of these would surely come back with the powder upon them melted, and the surface would be white. Both himself and wife waited anxiously for the return of the ware; she much less hopeful than he, however. When it came, he says in his journal, "I received nothing but shame and loss, because it turned out good for nothing."

Two years went by in this almost hopeless work, then a third,—three whole years of borrowing money, wood, and chemicals; three years of consuming hope and desperate poverty. Palissy's family had suffered extremely. One child had died, probably from destitution. The poor wife was discouraged, and at last angered at his foolishness. Finally the pottery fever seemed to abate, and Palissy went back to his drudgery of glass-painting and occasional surveying. Nobody knew the struggle it had cost to give up the great discovery; but it must be done.

Henry II., who was then King of France, had placed a new tax on salt, and Palissy was appointed to make maps of all the salt-marshes of the surrounding country. Some degree of comfort now came back to his family. New clothes were purchased for the children, and the overworked wife repented of her lack of patience. When the surveying was completed, a little money had been saved, but, alas! the pottery fever had returned.

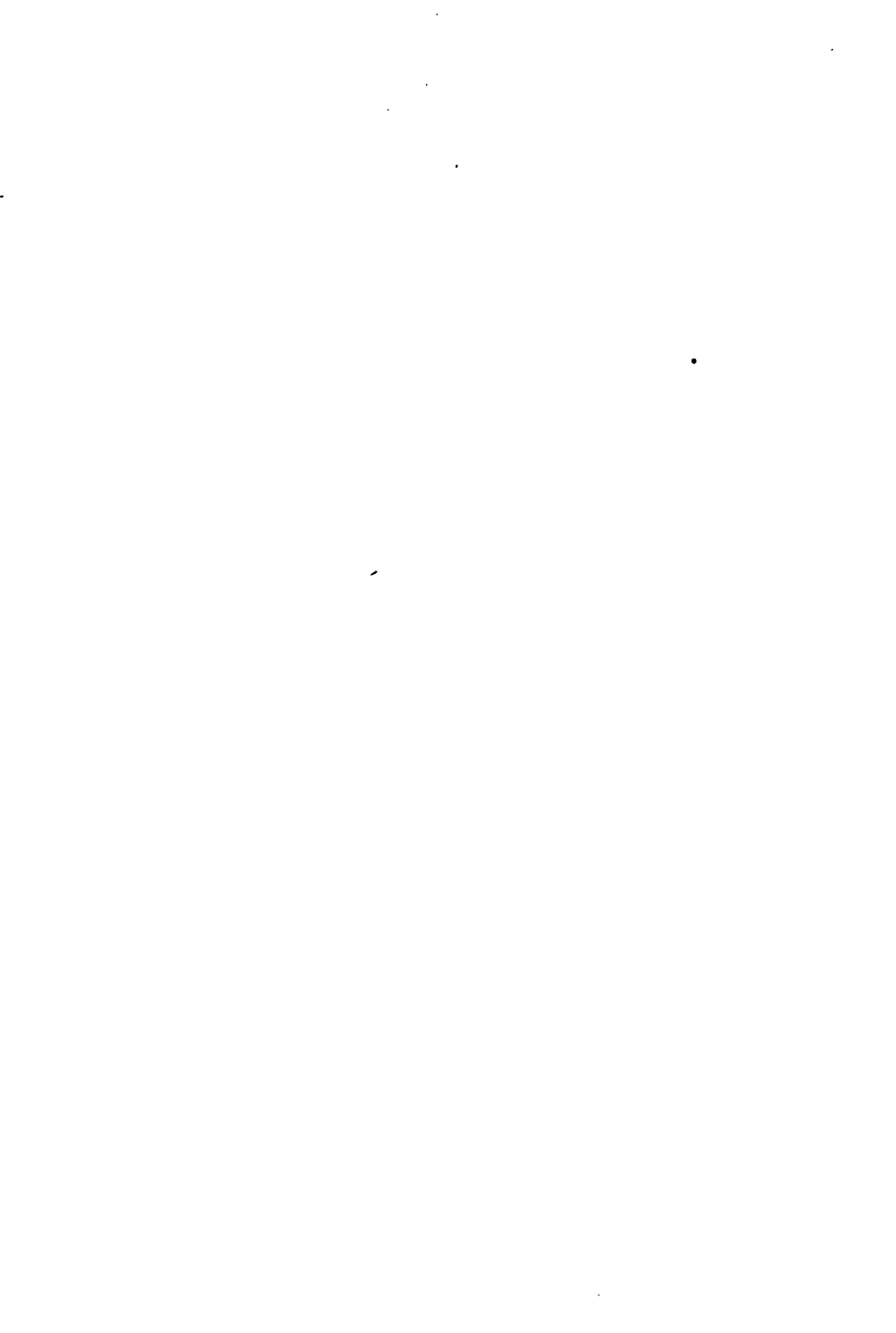
Three dozen new earthen pots were bought, chemicals spread over them as before, and these taken to a glass-furnace, where the heat would be much greater. He again waited anxiously, and when they were returned, some of the powder had actually melted, and run over the earthenware. This added fuel to the flame of his hope and ambition. And now, for two whole years more, he went between his house and the glass-furnace, always hoping, always failing.

His home had now become like a pauper's. For five years he had chased this will-o'-the-wisp of white enamel; and the only result was the sorrow of his relatives and the scorn of his neighbors. Finally he promised his heart-broken wife that he would make but one more trial, and if this failed, he would give up experimenting, and support her and the children. He resolved that this should be an almost superhuman effort. In some unknown way he raised the money for new pots and three hundred mixtures of chemicals. Then, with the feelings of a man who has but one chance for life, he walked beside the person who carried his precious stock to the furnace. He sat down before the mouth of the great hot oven, and waited four long hours. With what a sinking heart he watched the pieces as they were taken out! He hardly dared look, because it would probably be the old story of failure. But, lo! some were melted, and as they hardened, oh, joy unspeakable, they turned white! He hastened home with unsteady step, like one intoxicated, to tell his wife the overwhelming truth. Surely he could not stop now in this great work; and all must be done in secret, lest other potters learn the art.

Fears, no doubt, mingled with the new-born hopes of Mrs. Palissy, for there was no regular work before her husband, and no steady income for hungry little mouths. Besides, he must needs build a furnace in the shed



BERNARD PALISSY.



adjoining their home. But how could he obtain the money? Going to the brick-yard, he pledged some of the funds he hoped to receive in the future, and brought home the bricks upon his back. Then he spent seven long months experimenting in clay vessels, that he might get the best shapes and quality to take the enamel. For another month, from early morning till late at night, he pounded his preparations of tin, lead, iron, and copper, and mixed them, as he hoped, in proper proportions. When his furnace was ready, he put in his clay pots, and seated himself before the mouth.

All day and all night, he fed the fire, his little children bringing him soup, which was all the food the house afforded. A second day and night he watched the results eagerly; but the enamel did not melt. Covered with perspiration, and faint from loss of sleep and food, with the desperation of hope that is akin to despair, for six days and six nights, catching scarcely a moment of sleep, he watched the earthen pots; but still the enamel did not melt. At last, thinking that his proportions in his mixtures might have been wrong, he began once more to pound and grind the materials without letting his furnace cool. His clay vessels which he had spent seven months in making were also useless, so he hastened to the shops, and bought new ones.

The family were now nearly frantic with poverty and the pottery madness of the father. To make matters quite unbearable, the wood had given out, and the furnace-fires must not stop. Almost wild with hope deferred, and the necessities of life pressing upon him, Palissy tore up the fence about his garden, and thrust it into the furnace-mouth. Still the enamel did not melt. He rushed into the house, and began breaking up the table and chairs for fuel. His wife and children were horrified. They ran through the streets, crying out that

Palissy was tearing the house down, and had become crazy. The neighbors gathered, and begged him to desist, but all to no purpose. He tore up the floors of the house, and threw them in. The town jeered at him, and said, "It is right that he die of hunger, seeing that he has left off following his trade." He was exhausted and dried up by the heat of the furnace; but still he could not yield. Finally the enamel melted. But now he was more crazy than before. He must go forward, come what might.

With his family nearer than ever to starvation, he hired an assistant potter, promising the old promise,—to pay when the discovery had been perfected. The town of Saintes must have become familiar with that promise. An innkeeper boarded the potter for six months, and charged it to Palissy, to be paid, like all the other bills, in the future. Probably Mrs. Palissy did not wish to board the assistant, even had she possessed the necessary food. At the end of the six months the potter departed, receiving, as pay, nearly all Palissy's wearing-apparel, which probably was scarcely worth carrying away.

He now felt obliged to build an improved furnace, tearing down the old one to recover the bricks, nearly turned to stone by the intense heat. His hands were fearfully bruised and cut in the work. He begged and borrowed more money, and once more started his furnace, with the boast that this time he would draw three or four hundred francs from it. When the ware was drawn out, the creditors came, eager for their share; but, alas! there was no share for them. The mortar had been full of flints, which adhered to the vessels; and Palissy broke the spoiled lot in pieces. The neighbors called him a fool; the wife joined in the maledictions—and who could blame her?

Under all this disappointment his spirit gave way, and

he fled to his chamber, and threw himself upon the bed. Six of his children had died from want during the last ten years of struggle. What agony for the fond mother! "I was so wasted in person," he quaintly wrote afterwards, "that there was no form nor prominence of muscle on my arms or legs; also the said legs were throughout of one size, so that the garters with which I tied my stockings were at once, when I walked, down upon my heels, with the stockings too. I was despised and mocked by all."

But the long lane turned at last. He stopped for a year, and took up his old work to support his dying family, and then perfected his discovery. For five or six years there were many failures,—the furnaces were too hot, or the proportions were wrong; but finally the work became very beautiful. His designs from nature were perfect, and his coloring marvellous. His fame soon spread abroad; and such nobles as Montmorenci, who stood next in rank to the King, and counts and barons, were his patrons. He designed tiles for the finest palaces, ideal heads of the Saviour, and dainty forms from Greek mythology.

Invited by Catharine de Medicis, wife of King Henry II., Palissy removed to Paris, and was thenceforward called "Bernard of the Tuileries." He was now rich and famous. What a change from the day when his half-starved wife and children fled along the streets of Saintes, their furniture broken up for furnace-fires! And yet, but for this blind devotion to a single object, he would have remained a poor, unknown glass-painter all his life. While in Paris, he published two or three books which showed wide knowledge of history, mines, springs, metals, and philosophy. He founded a Museum of Natural History, and for eight years gave courses of lectures, attended by all the learned men of the day.

When his great learning was commented upon, he replied, "I have had no other book than the sky and earth, known to all." A wonderful man indeed!

All his life Palissy was a devoted Huguenot, not fearing to read his Bible, and preach to the people daily from it. Once he was imprisoned at Bordeaux, and but for his genius, and his necessity to the beautifying of palaces and chapels, he would have been put to death. When he was seventy-six, under the brutal Henry III., he was shut up in the Bastille. After nearly four years, the curled and vain monarch visited him, and said, "My good man, you have been forty-five years in the service of the Queen my mother, or in mine, and we have suffered you to live in your own religion, amidst all the executions and the massacres. Now, however, I am so pressed by the Guise party and my people, that I have been compelled, in spite of myself, to imprison these two poor women and you; they are to be burnt to-morrow, and you also, if you will not be converted."

"Sire," answered the old man, "you have said several times that you feel pity for me; but it is I who pity you, who have said, 'I am compelled.' That is not speaking like a King. These girls and I, who have part in the kingdom of heaven, we will teach you to talk royally. The Guisarts, all your people, and yourself, cannot compel a potter to bow down to images of clay."

The two girls were burnt a few months afterward. The next year, 1589, Henry III. was stabbed by a monk who knelt before his throne; and the same year, Palissy died in the Bastille, at the age of eighty.

CAROLUS LINNAEUS

SOMETHING over two hundred years ago a boy of whom the world was presently to hear was born in a small village in Sweden. His father, Nils Linne, was a poor clergyman, of whom now but little is known save that he was "an intelligent gardener, partly for the love of it and partly from necessity." He had a passion for rare and uncommon plants, and his little son, his first-born, shared this delight with him. When little Carl was only four years old, he knew the name of each flower and vegetable in the garden, and he was continually bringing in specimens of every sort, weeds as well as flowers and vegetables, to know their name and use. Every growing plant was to him a source of unending interest. When he was eight years old, he had a garden all his own, and he used to wander far afield for specimens to transplant.

Hour after hour and day after day the boy spent in his little plot watching things grow. He knew just how the tiny seeds swelled and burst their jackets, and how each little plantlet pushed its way up to light and air. Many of the secrets of unfolding bud and blossom too were his. Early he grasped the fact that the principal business of the plants is to grow seed, and he knew just how each one accomplished this miracle. He watched the busy pollen messengers come and go, and he knew exactly what plants filled their nectar cups for the humming-birds and bumble-bees, and what depended on the more humble insects of the garden. And as for the seed-

cases themselves—dainty little treasure boxes—it afforded him no end of pleasure to see how many different kinds he could collect: fruit, nuts, burrs, pods, and what not, of all kinds, sizes, shapes and colors. And some of these were very odd, as you know, if you have ever made a like collection. Some opened by springs, some had hinges, and others must be broken open to reach the treasures—the precious seeds so carefully hidden away.

Carl knew them all, and just how the busy little parent-plants had worked for weeks and weeks forming them and storing them safely away. He was a small boy indeed when he first pictured what would happen to the world if for one season the plants should all go on a strike and refuse to make seeds! Nothing was more interesting to him than the discovery of a new species, and it was a great day when he learned that it was possible for man to create these for himself. Half the time he went around with his head in the clouds, busy with little plans he had in mind, and doing the small chores entrusted to him so half-heartedly, or more often *forgetting them entirely*, that the neighbors and his father, too, thought him an exceedingly dull and careless child.

Indeed, so bored and inattentive was the boy at the first book tasks set him, that the good parson was quite in despair. He was anxious to have the lad grow up studious and concerned, and to have him enter the ministry as he and his father before him had done, but Carl seemingly cared for nothing at all but to potter about in his little garden! Of course, it was out of the question to have him grow up a gardener. There was little fame or fortune to be won in that way. And Mr. Linn quite determined to apprentice the lad to learn the shoemaker's trade.

Poor Carl! He hated the smell of leather, and to

have to peg away all day over a last, shut away from the fresh air, the birds and the sunshine, and his beloved plants, it was too bad! Bravely he sought his father, and had it out with him. He could not learn a trade, and if his father would only relent and send him to school, he would do his best to make good.

Mr. Linn took him at his word, and the boy marched off to school not far from his tenth birthday. Fortunately for him, but rather unfortunately for his father's plans, the schoolmaster was himself a botanist of no small merit. He soon discovered little Carl's unusual bent, and not only encouraged him in it, but often spent his Saturdays with him, wandering afar in search of rare specimens. And Carl, though he really tried to please his father, could not keep his mind on his books, and seemed bound to make a failure of study.

It would never do, Mr. Linn concluded, and he spoke his mind to his friend Rothmann, the physician of their little town: "I shall take the boy out and apprentice him. It is high time he was getting down to business."

"Hmm," said the good doctor, who, having no boys of his own, had pretty sound ideas as to how other people's boys should be brought up, "why not send him to me instead? I doubt if he would be a success at the trade. Botany and medicine go hand in hand. I've a notion I could interest him."

And so it came about.

Young Carl joyfully transferred his small effects to the home of his good benefactor, and was soon deep in his new duties, while the good doctor looked on applauding softly and congratulating himself on the success which is bound to follow when the mind is directed into its natural channels.

No one had to urge the boy now. He could not get enough of the books on botany and medicine with which

the doctor supplied him, and as for the practical work, he forgot his meals to attend to it. So several years went by; Carl Linn was now twenty-one, and on the advice of Rothmann, he went to the University of Upsala, in Stockholm, to pursue his studies, trying to make his way on an allowance of eight pounds a year (about \$40) from his father, and what he could earn in odd hours. It was little enough. But young Linn was fully roused now. He *must* have an education. So he cheerfully met his adversities: when his old shoes were badly worn, he folded paper and put into the soles to keep out the damp and cold, and there were many, many times when he went hungry. But all this only made him work the harder; he knew he must make good.

One day when the young man's funds were so low that he did not know where his next meal was coming from and he feared to face his landlady, he went out into the garden of the university to ponder his situation. There his eye caught a strange plant, and he fell at once to analyzing and classifying it. So absorbed was he in his task that he knew nought of the approach of a stranger until a voice addressed him. It was Dr. Celsius, a prominent physician and botanist, who was so pleased with the young man's intelligence and industry that he hired him on the spot to assist him in his spare hours with a work he had in hand,—the compiling of a treatise on the plants of the Bible. Young Linn at once became an inmate of the learned doctor's home, and later the good man secured him pupils for private instruction and helped him not a little himself with advice in his own reading.

While with Celsius, Linn wrote a paper on the sexes of plants which was so admirable that the renowned Rudbeck, the head of the department of botany at

Upsala, was attracted, and subsequently the young man became his assistant and director of the university botanical garden, in which he would gladly have become a gardener a few short months before! During the vacation, Linn was sent to Lapland to secure some botanical specimens for his department, his expenses being paid by the University. He traveled over some 5,000 miles, a large portion of it on foot, and secured not only many valuable plants but a rich experience which he put into book form some five years later.

After receiving his degree at the University, Linn went to Holland to pursue his medical studies. Here he at once made friends with George Clifford, a rich banker, who was considerable of a botanist, and had a very beautiful garden on his fine estate. Linn never tired of working there among the many rare plants, and when occasion offered he made a trip through France and England to increase this supply. His expenses, and good wages besides, were paid by Mr. Clifford, who further provided his young friend with introductions here and yonder, so that his scientific and influential acquaintance was widened, and his reputation grew to such an extent that he was frequently asked to give botanical lectures in the places where he visited.

Having finished his course in medicine, Dr. Linn set up for the practice of medicine in Stockholm, but now he was as a stranger in a strange land. Nearly every one in the city had heard of Prof. Linn, the famous botanical authority; but they knew nothing of *Doctor* Linn. He had few patients, and presently he was glad indeed to accept the chair of medicine and natural history at Upsala. The offer included a year's botanical tour in the Northern provinces, and on his return Prof. Linn managed to exchange places with a brother pro-

fessor, and by so doing came to be head of the botanical department, a position for which he was eminently fitted.

Now care and uncertainty were left far behind; henceforth the Professor wrote his name in Latin—*Carolus Linnaeus*—and faced the world as a teacher and a nature writer whose books soon came to be eagerly read. No one was ever more popular with students; his class rooms were crowded, and botanists came from all over the world to attend his celebrated botanical excursions, which were conducted far and near. His reputation became unique and world-wide; nearly every mail brought him gifts and specimens, so that presently the Linnaeus collections and library were magnificent indeed. These were purchased after the great botanist's death by Sir James Edward Smith, the first president of the London Linnaean Society. This society is still active, and awards a gold medal each year, now to the most deserving botanist, again to the zoölogist whose work is of extra merit; while the papers read at the fortnightly meetings are published in expensively illustrated editions.

When Linnaeus came to the fore, botanists had named many of the plants and grouped them together, but only the beginning had been made of classifying scientifically. The learned men were, as you might say, *stumped!* For instance, take the rose family: *rosa* they called it. But when some particular rose was mentioned it had to be described. This was awkward and laborious, but no one knew how to mend matters.

"Why not use two names," suggested Linnaeus: "The first one to stand for the family, the second to name the individual?"

For instance, suppose one has in hand the early yellow

or round-leaf violet: how shall it be described scientifically? First, comes the name of the family, *viola*: *Linnaeus* added to this a descriptive term—round-leaf, for instance, *rotundifolia* and thus obtained—*viola rotundifolia*—round-leaf or yellow violet.

The names used are always in Latin. Why? There are a great many different languages, but the scholars of all nationalities study Latin. So by common consent the names of plants, animals and minerals—the three kingdoms—are written in Latin. In this way, the names are alike all over the world, and thus much confusion is avoided.

While giving a lecture in botany, in his sixtieth year, Linnaeus was stricken with a slight attack of apoplexy. Though he recovered sufficiently to go on with his work of teaching and writing awhile longer, thenceforward his wonderful memory was impaired, and by and by a second shock rendered him helpless. But still so great was his vitality that he did not succumb. The last several months of his life were passed in mental darkness, which the sight of flowers and the opening buds could not overcome. He died in 1778, and his death was mourned by all who knew and loved him. Many years before, he had received a title of nobility, and now, the King of Sweden sent out a memorial address from his throne, praising the work and career of the great botanist.

“Linnaeus,” we are told, “was a man of small size, with a large head and bright piercing eyes. It is said he had a bad temper, but that he quickly got over his anger. His friends were very fond of him, and he had a great many. His life was noble and true. He loved the study of plants, and when rich he worked just as hard to find and classify them. It was a pleasure to

him to help his students, who remembered him with the greatest respect and love. When he became famous and rich he lived in the simplest and most frugal manner until his death."

So long as there are students of nature, so long will the name of Linnaeus be famous. It is a most beautiful tribute to his memory that botanists have given the twin-flower the scientific family name of *Linnaea*. This dainty plant, with its nodding pink or white fragrant bell-shaped flowers, was a great favorite with the noted botanist. Thriving as it does in poor soil and under rugged Alpine conditions, it is a sturdy type of the wonderful life of the man for whom it is named—the man whom poverty and the most adverse circumstances could not keep from becoming truly great, the man who was a success because from boyhood he had followed a course which was of the greatest possible interest to him.



SAMUEL JOHNSON.



SAMUEL JOHNSON

IN a quaint old house in Lichfield, England, now used as a draper's shop, Samuel Johnson, son of a poor bookseller and bookbinder, was born. Here, as in Westminster Abbey, a statue is erected to his memory. Near by is the schoolhouse where Addison and Garrick studied.

When Samuel was two and a half years old, diseased with scrofula, his good mother, with ten dollars sewed in her skirt so that nobody could steal it, took him to London that, with two hundred others, he might be touched by Queen Anne, and thus, as superstitious people believed, be healed. On this journey she bought him a silver cup and spoon. The latter he kept till his dying day, and parted with the cup only in the dire poverty of later years.

The touch of the Queen did no good, for he became blind in one eye; with the other he could not see a friend half a yard off, and his face was sadly disfigured. Being prevented thus from sharing the sports of other boys, much time was spent in reading. He was first taught at a little school kept by Widow Oliver, who years after, when he was starting for Oxford, brought him a present of gingerbread, telling him he was the best scholar she ever had. After a time he studied Latin under a master who "whipped it into him." The foolish teacher would ask the boy the Latin word for candlestick, or some unexpected thing, and then whip him, saying, "This I do to save you from the gallows!"

Naturally indolent, Samuel had to struggle against this tendency. He had, however, the greatest ambition to excel, and to this he attributed his later success. He was also inquisitive, and had a wonderful memory. When he wore short dresses, his mother gave him the Prayer-Book one day, and, pointing to the Collect, said, "You must get this by heart." She went up stairs, but no sooner had she reached the second floor than she heard him following. He could repeat it perfectly, having looked it over but twice. He left school at sixteen, spending two years at home in helping his parents, and studying earnestly. One day, his father, being ill, asked him to go to a neighboring town and take his place in selling books at a stall on market-day. He was proud, and did not go. Fifty years afterward, in his greatness, then an old man, he went to this stall, and, with uncovered head, remained for an hour in the rain where his father had formerly stood, exposed to the sneers of the bystanders and the inclemency of the weather. It showed the repentance of a noble soul for disobedience to a parent.

At nineteen, he entered Pembroke College, Oxford, where he acted as servant. He used to go daily to his friend Taylor, and get lectures second-hand, till his feet, showing through his worn-out shoes, were perceived by the students, and he ceased going. A rich young man secretly put a pair of new shoes at his door, which he indignantly threw out of the window. He was willing to work and earn, but would not receive charity. At the end of three years he became so poor that he was obliged to leave college, his father dying soon after.

After various experiences, he sought the position of usher at a school, but was refused because it was thought that the boys would make fun of his ugliness.

He finally obtained such a place, was treated with great harshness, and left in a few months. Strange to say, the poor, lonely scholar, only twenty-six, now fell in love with a widow forty-eight years old. After obtaining his mother's consent, he married her, and the union proved a most happy one. With the little money his wife possessed, he started a school, and advertised for pupils; but only three came, and the school soon closed. In despair he determined to try London, and see if an author could there earn his bread. In that great city he lived for some time on nine cents a day. One publisher to whom he applied suggested to him that the wisest course would be to become a porter and carry trunks.

A poem written at this time, entitled "London," for which he received fifty dollars, one line of which was in capital letters,

"SLOW RISES WORTH BY POVERTY DEPRESSED,"

attracted attention; and Pope, who was then at the height of his fame, asked Dublin University to give to the able scholar the degree of M. A., that he might thus be able to take the principalship of a school, and earn three hundred dollars a year; but this was refused. ~~Out of such struggles come heroic souls.~~

When he was forty, he published the "Vanity of Human Wishes," receiving seventy-five dollars. This is asserted by many to be the most impressive thing of its kind in the language. The lines,

"There mark what ills the scholar's life assail,
Toil, envy, want, the patron, and the jail,"

show his struggles. A drama soon after, played by the great actor, David Garrick, brought him nearly a

thousand dollars; but the play itself was a failure. When asked by his friends how he felt about his ill success, he replied, "Like the monument," meaning that he continued firm and unmoved, like a column of granite. Fame was coming at last, after he had struggled in London for thirteen years—and what bitterness they had brought!

For two years he worked almost constantly on a paper called the *Rambler*. When his wife said that, well as she had thought of him before, she had never considered him equal to this, he was more pleased than with any praise he ever received. She died three days after the last copy was published, and Johnson was utterly prostrated. He buried himself in hard work in his garret, a most inconvenient room; but he said, "In that room I never saw Mrs. Johnson." Her wedding-ring was placed in a little box, and tenderly kept till his death.

Three years afterward, his great work, his Dictionary, appeared, for which he received eight thousand dollars; but, as he had been obliged to employ six assistants for seven years, he was still poor, but now famous. The Universities of Oxford and Dublin, when he no longer needed their assistance, hastened to bestow their degrees upon him. Even George III. invited him to the royal palace,—a strange contrast to a few years before, when Samuel Johnson was under arrest for a debt of thirty dollars! When asked by Reynolds how he had obtained his accuracy and flow of language in conversation, he replied, "By trying to do my best on every occasion and in every company." About this time his aged mother died, and in the evenings of one week, to defray her funeral expenses, he wrote "Rasselas," and received five hundred dollars for it. He wrote in his last letter to her, "You have been the best mother, and I believe the

best woman, in the world. I thank you for your indulgence to me, and beg forgiveness of all that I have done ill, and of all that I have omitted to do well." His last great work was "The Lives of the Poets."

He received now a pension of fifteen hundred dollars a year, for his valuable services to literature, but never used more than four hundred dollars for himself. He took care of a blind woman of whom he said, "She was a friend to my poor wife, and was in the house when she died, she has remained in it ever since;" of a mother and daughter dependent upon an old family physician; and of two men whom nobody else would care for. Once when he found a poor woman on the street late at night, he took her home, and kept her till she was restored to health. His pockets were always filled with pennies for street Arabs; and, if he found poor children asleep on a threshold, he would slip money into their hands that, when they awakened, they might buy a breakfast. When a servant was dying who had been in the family for forty-three years, he prayed with her and kissed her, the tears falling down his cheeks. He wrote in his diary, "We kissed and parted—I humbly hope to meet again, and part no more." He held, rightly, that Christianity levels all distinctions of rank.

He was very tender to animals. Once, when in Wales, a gardener brought into the house a hare which had been caught in the potatoes, and was told to give it to the cook. Dr. Johnson asked to have it placed in his arms; then, taking it to the window, he let it go, shouting to it to run as fast as possible. He would buy oysters for his cat, Hodge, that the servants, from seeing his fondness for it, might be led to treat it kindly.

He died at the age of seventy-five, such men as Burke and Reynolds standing by his bedside. Of the latter, he begged that he would "read his Bible, and never paint on

Sundays." His last words were to a young lady who had asked his blessing: "God bless you, my dear!" He was buried with appropriate honors in Westminster Abbey, and monuments are erected to him in St. Paul's Cathedral, and at Lichfield. The poor boy, nearly blind, became "the brightest ornament of the eighteenth century."

BENJAMIN FRANKLIN

BENJAMIN FRANKLIN, our first great American, was born in Boston, January 17, 1706. His father was a soap and candle maker. Benjamin was the fifteenth child, and the youngest son in the family. Two little daughters were born after him, so that, in all, the Franklins had seventeen children. But some of them were married and gone from the home nest before "Ben" was able to sit up to the table in his little high chair.

Of course, where there were so many children, each one had to learn to work. But Ben did not at all take to the idea! He much preferred to read. And in this his mother helped him: she was glad to see one of her children quiet and studiously inclined. "Let him alone, Josiah," she would say to her husband. "He will have time enough to work when he gets older." But the father would always answer: "No, Abiah; he must learn to work. No good comes of letting a boy loll around. He must make up his mind to work, for that is what he will have to do in this world."

So when Benjamin was ten years old he was asked to pick out a trade. His father could not afford to send him to school any longer. His mother wanted "Benny" to be a preacher, because he had such a great fondness for books; but Benny laughed at the idea. He had not a very religious turn of mind. Indeed, the story is told, that, at about this time, when down in the cellar, one day, with his father, helping pack a barrel of meat, he asked:

"Say, father, why don't you say a blessing over this whole barrel of meat right here? It would save wasting so much time and breath at the table!"

What Mr. Franklin thought of this speech is not recorded, but he must have felt clearly enough that Benjamin would not do for a minister. For, evenings after his work was done, he took the lad by the hand and went about with him among the tradesmen. They visited the shops of carpenters, bricklayers, coopers, shoemakers, and blacksmiths; but Benjamin did not think he would like any of these.

"Very well," said his father, kindly enough, for he could not help loving the quick-witted, even-tempered lad, "you shall be my apprentice until you decide what you wish to do."

So Ben perforce ladled grease, measured wicks, and dipped candles, when he *had* to, and oh! how he hated it! He had a good mind to cut the whole thing and run away to sea. But fortunately the father was a good mind reader. He had lost one boy that way, and he did not mean to lose another. So he had a most serious talk with Benjamin, and laid down the law to him. The boy had to stop fooling and get down to business. So Benjamin said he would be a printer. His oldest brother was a printer, and he could learn the trade with him.

Indeed, James Franklin thought he knew all there was to be learned about the printing business. His "devil" had run away. He needed help, and was willing to take Ben and make a man of him. So the papers were made out, and Benjamin was "bound over" to serve his brother for nine years. He would then be of age, and, it was hoped, a full-fledged printer as well.

Young Benjamin was quite pleased with the idea. In those days a printer was "somebody." People called him "Mr. Printer" or "Mr. Editor," and took off their hats



BENJAMIN FRANKLIN.

Né à Boston, dans la nouvelle Angleterre le 17-Janvier 1706

when they met him on the street. But Ben found the life anything but a bed of roses. His brother James had a horrible temper, and cuffed him from one job to another. He ran errands, tied up bundles, cleaned presses, washed type, and smeared himself all over with ink, in his efforts to please. When James was out, he tried his hand at the case, and could soon set type better than any man there. He was also a good hand at the press. And, presently, James got a new devil, and promoted Ben. But he did not improve in his manners toward his brother.

Ben thought he could not stand it. But he liked the printing, and wanted to learn the trade, so he put up with ill-treatment awhile longer. He began to see that it was well for a man to have some business in life. While he was setting type one day an idea popped into his head that he could write every bit as good copy as that before him. For a long time he had been studying and writing evenings, and he could really do very good work. But he knew better than to offer any of it to his brother. That evening he wrote an article in his best style and slipped down early in the morning, and pushed it under the office door.

James Franklin published the *New England Courant*, one of the three papers then printed in America, and he thought that he was a very important man indeed. But he was delighted with the article. He thought it must have been written by somebody of quality who did not wish to sign his name; so he published it. Ben grinned to himself, and kept right on writing at night and pushing his copy under the door in the morning. He wrote very good verses, and had about made up his mind to be a poet, when his father happened to hear about it, and marched right down to the office to speak his mind. He told Ben to give up the idea at once, *for poets never*

amounted to anything! The old man was much excited, and Ben told him to go home in peace; he would give up trying to be a poet.

Shortly matters in the *Courant* office came to such a pass that Ben could not stand it any longer. So he slipped away to New York. He had little money, and no knowledge of anything but printing. And the Fates were against him. The New York paper had all the help heeded, and Ben was again minded to try the sea. But thoughts of his father interfered. He knew just how disappointed and angry he would be; so he made up his mind to try Philadelphia.

And a hard journey he had! Being forced by his lack of funds to walk the better part of the way, he was more than once held up as a runaway servant. At length, however, he managed to get off in a leaky boat, where he well-nigh wore himself out at the pumps, and finally arrived at his destination tired and sore in every muscle. He had not slept, his clothes were torn and soiled, his money was all but gone, and altogether he was in a sorry plight. Food was the first thing needed. He was simply ravenous. Going into a bakery, he asked for three pennyworth of bread. To his surprise, he got three large rolls. His pockets bulged with his extra shirts and stockings, so he tucked a roll under each arm, and walked along eating the third greedily. As he went past a certain house, a pretty girl came to the door, and laughed heartily at his comical appearance. She was Deborah Read, and seven years later she became his wife.

Presently Ben Franklin had indeed come to be somebody. He had worked and studied, often going without bread to buy books, and he had carefully saved his money, until in his early twenties he was owner and publisher of the *Pennsylvania Gazette*, and people said it was the best paper in the colonies. Up to its time newspapers

were mostly of one sheet, and contained nothing but "news." Franklin started advertising, which has grown until now some papers have very little but "ads." His paper was at once a success. It was well printed, and Franklin's bright articles on the subjects of the times brought him many subscribers.

Besides the paper, Franklin also turned out a great many leaflets. Book publishing was a very slow business in those days, and there were few printed. The "leaflets" largely took their place. And you may be sure that no one wrote one unless there was something to say, and that it was briefly told. They were mostly about politics and the rights of the colonies.

In some homes the almanac was almost the only "book" besides the Bible. Franklin knew that the people read it over and over; and he decided to make one himself that would be worth while. This he called *Poor Richard's Almanac*, and presently people everywhere were talking of the wise and witty sayings of "Poor Richard," who, of course, was none other than Benjamin Franklin himself. For twenty-five years the almanac appeared regularly, and then in the last one Franklin gathered together all his sayings throughout the years, putting them into an address which he called "The Speech of Father Abraham." It was the talk of an old man to the people who had come to a public sale. You must read it for yourself some day. It is a wonderful speech, and it has been printed in more than ten different languages. It will never be out of print.

From the first, Franklin and his paper were live wires for public improvement. Among the first things which he did was to found the Junto, or Leather Apron Club. They met together for study. At first, they each brought what books they could to the club room, and the members borrowed from each other. This gave Franklin the idea

of a public library. So he *founded the first public library in America*. It was such a success that other cities and towns at once copied his plans, and a way of learning was opened to the people.

Franklin next formed a Union Fire Company, the first of its kind in America. He also started a Fire Insurance Company. Next Franklin turned his eye upon the old city watchman, and soon he had a movement on foot which grew into the police force of the present day. He had the streets of Philadelphia paved and lighted. He started a society for the study of science (The American Philosophical Society), and took the lead in setting on foot a high school, which now stands as the University of Pennsylvania. He also helped to start the first public hospital in America.

While Franklin was seeking to better all things about him, he was also bettering himself. He drew up a set of rules covering temperance, order, simple living, truthfulness, and justice, and set himself to follow them carefully, that he might be perfect in these things. A Quaker friend told him that he thought too much of his own opinion. Franklin thanked him, and made out another rule, on meekness of spirit. He added to these rules whenever he discovered in himself a fault which needed to be corrected. And, of course, he did not fail to get great help from this sensible plan.

Every moment that he could find, Franklin was reading and studying. He taught himself French, Italian, Spanish and Latin. Like his father, he loved music, and could play the harp, the violin, and the guitar. He was also very fond of a game of chess. And he loved to talk. Moreover he was so interesting and entertaining, in such a simple and delightful way, that people liked nothing better than to listen to him. He brimmed over with wit

and humor, and altogether was better than the best of story books.

Franklin was made Postmaster of Philadelphia in 1737. Later he was made Postmaster General of all the colonies, and nowhere could there have been a better man found for this service. When he took charge, the mails were carried by post riders, who went thirty miles each day on horseback. There were never more than three mails per week, even between the largest towns. The postal business was a big expense to the colonies, and no one seemed to know how to better matters. But Franklin did. He said, "Let us have stamps." And straightway sprung up the penny stamps, which today portray his likeness. "Every penny stamp is a monument to Franklin." some one has said. Perhaps you will think of this when you see the next one.

With so many outside interests, Franklin no longer had time for the close work of his printing business. Nor did he need longer to keep his nose so close to the grindstone. He was worth \$75,000—proof positive that he had followed the advice of "Poor Richard." He could live on his income, which was something over \$4000 per year. So he turned over his publishing affairs to a working partner, and prepared to devote more time to study and experiments.

The realm of nature interested him. Many of Franklin's ancestors had been sons of the land, and Ben himself came very near being a farmer. He interested himself in the study of soil, and he found out that plaster was very good for it. On the fence of a field outside of Philadelphia, he printed "This Has Been Plastered." The farmers looked at the brilliant green of the crop and stared. They thought Franklin was a wonder, for no one had been able to grow a good crop in that field before.

And he *was* a wonder. He turned his mind to many things. By chance he came upon a colony of ants. He became interested in them, and watched them until he found out all about their habits. He published a little leaflet about them, which made the scientists open their eyes. Then he got interested in the study of the weather, and finally became very sure that lightning and thunder were caused from electric currents in the air. Wise men laughed at him. But Franklin was sure he could prove it.

All the world knows the story of how he drew electricity from the clouds by means of a silk kite, a hemp string, and his own door key. And how happy he was! He had discovered something which would place him among scientists. And, best of all, it would be of great use to mankind, just how useful, of course, the good man did not even dream. What, think you, would be his sensations today, could he come back to earth and see the great uses to which his discovery has been put? Would not the telegraph, the telephone, the ocean cables, the street cars, the electric lights, and the thousand other uses we make of electricity be a joy to him?

Of course, having been so much in the public eye, it was to be expected that Franklin's country would ask his help in the many dilemmas of the times. He drew up the famous Albany Plan of Union by which the colonies might act together; but it was not accepted, because the people thought it gave too much power to England. He did good service as a colonel in the French and Indian War; later when trouble with the mother country threatened, he was sent to England to do what he could to straighten matters. He expected to be gone only a few months, but he stayed ten years, doing all he could to show the English people what America was really like. He made many friends for himself; but he could not do

much towards making friends for his country. King George the Third and his followers were determined to treat America as the child of England, and to punish what they termed her disobedience by all manner of unjust taxations. When he saw that war must come, Franklin slipped away home, but the battles of Concord and Lexington had been fought before he touched port.

Franklin was now sixty-nine years old, older than Washington was when he died. He had already done a great deal for his country, and had certainly earned a rest. But he was well and hearty, and his country could not spare him. He had hardly landed when he was made a member of the Second Continental Congress. He went to work at once, and did a great deal toward organizing the army and navy and raising money. No doubt, too, he had a hand in seeing that Washington was made commander-in-chief, for though he was twenty-six years the elder the two were the greatest friends.

No one was better than Franklin on a committee. Thomas Jefferson, Benjamin Franklin, John Adams, Roger Sherman, and Robert R. Livingston were made a committee to write the Declaration of Independence: and you may be very sure that Franklin had no little influence in what was said. When the Declaration was read to the delegates, Mr. Harrison followed with an earnest appeal for all present to sign it. "Aye," said Franklin, quickly, "We must all hang together, or certainly we shall all hang separately." Full well he knew that if the Revolution failed, every one whose name was signed to the Declaration would be given the worst punishment of the law.

Presently Congress asked Franklin to go to France and see if he could not get help. They knew, and England knew, that if France would aid us, we would win. Franklin was now seventy years old—too old for a voyage which promised so much peril and hardship.

But he could not refuse. He was a born diplomat, and he was more likely to get what was required than anybody else. "See how he got the Quakers to take part in the war," his supporters pointed out. The Friends were in sympathy with the cause, but their religion forbade war. They balked on voting to buy gunpowder. So Franklin had the vote for the money made to read, "for bread, flour, wheat, *or other grain.*" Again, the Quakers could not vote for purchasing cannon. Franklin had the bill worded for *fire-engines*. And the Friends voted for both measures to a man. But do not imagine for an instant that these sturdy pioneers did not know what they were doing!

Every one in France had heard of Franklin. They were glad to know that he was coming, and he landed in safety, despite the fact that his ship was more than once given a merry chase enroute. Moreover, he got what he went after. But he did not come back with the soldiers. He stayed as the American Minister, borrowed money, sent us supplies, looked after the exchange of prisoners, and did a wonderful service for his country.

Franklin was one of the signers of the treaty of peace with England in 1783. This closed the war. Two years after, Jefferson went over to France, and Franklin was allowed to come home. Some one asked Jefferson if he had come to take Franklin's place. "No," said he; "No one could do that. I am just his successor."

Franklin's health now suddenly failed. His good wife had died while he was away as Minister to England. He now made his home with his daughter, and here he was shortly confined to his bed with gout and a complication of troubles which made him a great sufferer for nearly

two years. Toward the last he was bothered by a bad pain in his breast. A friend wanted to move him so that he might rest easier. "No," said Franklin; "a dying man can do nothing easily." These were his last words. He died April 17, 1790, at the age of eighty-four years and three months. His last public act was a letter to Congress asking them to do away with slavery.

OLIVER GOLDSMITH

ON a low slab in a quiet spot, just north of the Church of Knight Templars, in London, are the simple words, "Here lies Oliver Goldsmith." The author of the "Vicar of Wakefield" needs no grander monument; for he lives in the hearts of the people.

Oliver Goldsmith was born in Pallas, Ireland, in 1728, the son of a poor minister, who, by means of tilling some fields and assisting in a parish outside his own, earned two hundred dollars a year for his wife and seven children. When about six years old, Oliver nearly died of smallpox, and his pitted face made him an object of jest among the boys. At eight he showed great fondness for books, and began to write verses. His mother pleaded for a college education for him, but there seemed little prospect of it. One day, when a few were dancing at his uncle's house, the little boy sprang upon the floor and began to dance. The fiddler, to make fun of his short figure and homely face, exclaimed, "Æsop!" The boy, stung to the quick, replied:—

"Heralds, proclaim aloud! all saying,
'See Æsop dancing and his monkey playing;'"

when, of course, the fiddler became much chagrined.

All his school life Oliver was painfully diffident, but a good scholar. His father finally earned a better salary, and the way seemed open for college, when, lo! his sister, who had the opportunity of marrying a rich man, was

obliged—so thought the public opinion of the day—to have a marriage portion of \$2,000, and poor Oliver's educational hopes were blasted. He must now enter Trinity College, Dublin, as a sizar (servant), wear a coarse black gown without sleeves, a red cap,—the badge of servitude,—sweep the courts, carry dishes, and be treated with contempt, which nearly crushed his sensitive nature.

A year and a half later his father died, and his scanty means ceased from that source. To keep from starving he wrote ballads, selling them to street musicians at a pittance, and stole out at night to hear them sung. Often he shared this pittance with some one more wretched than himself. One cold night he gave his blankets to a woman with five children, and crawled into the ticking of his bed for warmth. When a kind friend, who often brought him food, came in the morning, he was obliged to break in the door, as Goldsmith could not extricate himself from his bed.

Obtaining a small scholarship, he gave a little party in his room in honor of the event. A savage tutor appeared in the midst of the festivities, and knocked him down. So incensed was Goldsmith that he ran away from college, and with twenty-five cents in his pocket started for Cork. For three days he lived on eight cents a day, and, by degrees, parted with nearly all his clothes for food.

Though wholly unfitted for the ministry, Goldsmith was urged by his relatives to enter the church, because he would then have a living. Too young to be accepted, he remained at home for two years, assisting his brother Henry in the village school; and then offered himself as a candidate, was refused, it was said, because he appeared before the right reverend in scarlet trousers! After being tutor for a year, his uncle gave him \$250, that he

might go to Dublin and study law. On arriving, he met an old friend, lost all his money in playing cards with him, and, ashamed and penniless, returned and begged the forgiveness of his relative.

A little more money was given him, and with this he studied medicine in Edinburgh for over a year, earning later some money by teaching. Afterward he travelled in Italy and France, begging his way by singing or playing on his flute at the doors of the peasants, returning to England at twenty-eight years of age without a cent in his pocket. Living among the beggars in Axe Lane, he asked to spread plasters, or pound in the mortars of the apothecaries, till, finally, a chemist hired him out of pity. Through the aid of a fellow-student, he finally opened a doctor's office, but few came to a stranger, and these usually so poor as to be unable to pay.

Attending one day upon a workman, he held his hat close to his breast, so as to cover a big patch in his second-hand clothes, while he felt the patient's pulse. Half guessing the young doctor's poverty, the sick man told him about his master, the author of the famous old novel, "Clarissa Harlowe," and how he had befriended writers. Goldsmith at once applied for work, and became press corrector in Salisbury Court, Fleet Street.

Later he was employed as a reviewer on a magazine. Being obliged to submit all his reviews to an illiterate bookseller and his wife, the engagement soon came to an end. He lived now in a garret, was dunned even for his milk-bill, wrote a book for a college friend, under whose name it was published, and began a work of his own, "Polite Learning in Europe," writing to a wealthy relative for aid to publish, which letter was never answered, though it was greatly regretted after Goldsmith became famous.

With no hope in London, he was promised a position

in the East Indies. Life began to look bright, though his Fleet Street garret, with one chair, was surrounded by swarms of children and dirt. The promise was not kept, and he applied for the position of hospital mate. His clothes being too poor for him to be seen on the streets, he pledged the money to be received for four articles, bought a new suit, went up to the court of examiners, and was rejected! Had any of these positions been obtained, the world, doubtless, would never have known the genius of Oliver Goldsmith.

He went back to his garret to write, pawned his clothes to pay the landlady, who was herself to be turned out of the wretched lodgings, sold his "Life of Voltaire" for twenty dollars, and published his "Polite Learning in Europe," anonymously. The critics attacked it, and Goldsmith's day of fame had dawned at last. "The Citizen of the World," a good-natured satire on society, next appeared, and was a success. Dr. Johnson became his friend, and made him a member of his club with Reynolds, Burke, and other noted men. The "Traveller" was next published, with an immense sale. Goldsmith now moved into the buildings which bear his name, near Temple Church, and, for once, had flowers and green grass to look out upon.

He was still poor, doubtless spending what money he received with little wisdom. His landlady arrested him for room-rent, upon hearing which, Dr. Johnson came at once to see him, gave him money, took from his desk the manuscript of the "Vicar of Wakefield," and sold it to a publisher for three hundred dollars. This was the fruit of much labor, and the world received it cordially. Some of his essays were now reprinted sixteen times. What a change from the Fleet Street garret!

The "Deserted Village" was published five years later, Goldsmith having spent two whole years in revising

it after it was written, so careful was he that every word should be the best that could be chosen. This was translated at once into German by Goethe, who was also a great admirer of the "Vicar of Wakefield." He also wrote an English History, a Roman, a Grecian, several dramas, of which "She Stoops to Conquer" was the most popular, and eight volumes of the "History of the Earth and Animated Nature," for which he received five hundred dollars a volume; but this work he left unfinished.

Still in debt, overworked, laboring sometimes far into the morning hours, not leaving his desk for weeks together, even for exercise, Goldsmith died at forty-five, broken with the struggle of life, but with undying fame. When he was buried, one April day, 1774, Brick Court and the stairs of the building were filled with the poor and the forsaken whom he had befriended. His monument is in the Poet's Corner at Westminster Abbey, the greatest honor England could offer. True, she let him nearly starve, but she crowned him at the last. He conquered the world by hard work, kindness, and a gentleness as beautiful as his genius was great.

JAMES WATT

THE history of inventors is generally the familiar struggle with poverty. Sir Richard Arkwright, the youngest of thirteen children, with no education, a barber, shaving in a cellar for a penny to each customer, dies worth two-and-one-half million dollars, after being knighted by the King for his inventions in spinning. Elias Howe, Jr., in want and sorrow, lives on beans in a London attic, and dies at forty-five, having received over two million dollars from his sewing-machines in thirteen years. Success comes only through hard work and determined perseverance. The steps to honor, or wealth, or fame, are not easy to climb.

The history of James Watt, the inventor of the steam-engine, is no exception to the rule of struggle to win. He was born in the little town of Greenock, Scotland, 1736. Too delicate to attend school, he was taught reading by his mother, and a little writing and arithmetic by his father. When six years of age, he would draw mechanical lines and circles on the hearth, with a colored piece of chalk. His favorite play was to take to pieces his little carpenter tools, and make them into different ones. He was an obedient boy, especially devoted to his mother, a cheerful and very intelligent woman, who always encouraged him. She would say in any childish quarrels, "Let James speak; from him I always hear the truth." Old George Herbert said, "One good mother is worth a hundred schoolmasters"; and such a one was Mrs. Watt.

When sent to school, James was too sensitive to mix with rough boys, and was very unhappy with them. When nearly fourteen, his parents sent him to a friend in Glasgow, who soon wrote back that they must come for their boy, for he told so many interesting stories that he had read, that he kept the family up till very late at night.

His aunt wrote that he would sit "for an hour taking off the lid of the teakettle, and putting it on, holding now a cup and now a silver spoon over the steam, watching how it rises from the spout, and catching and condensing the drops of hot water it falls into."

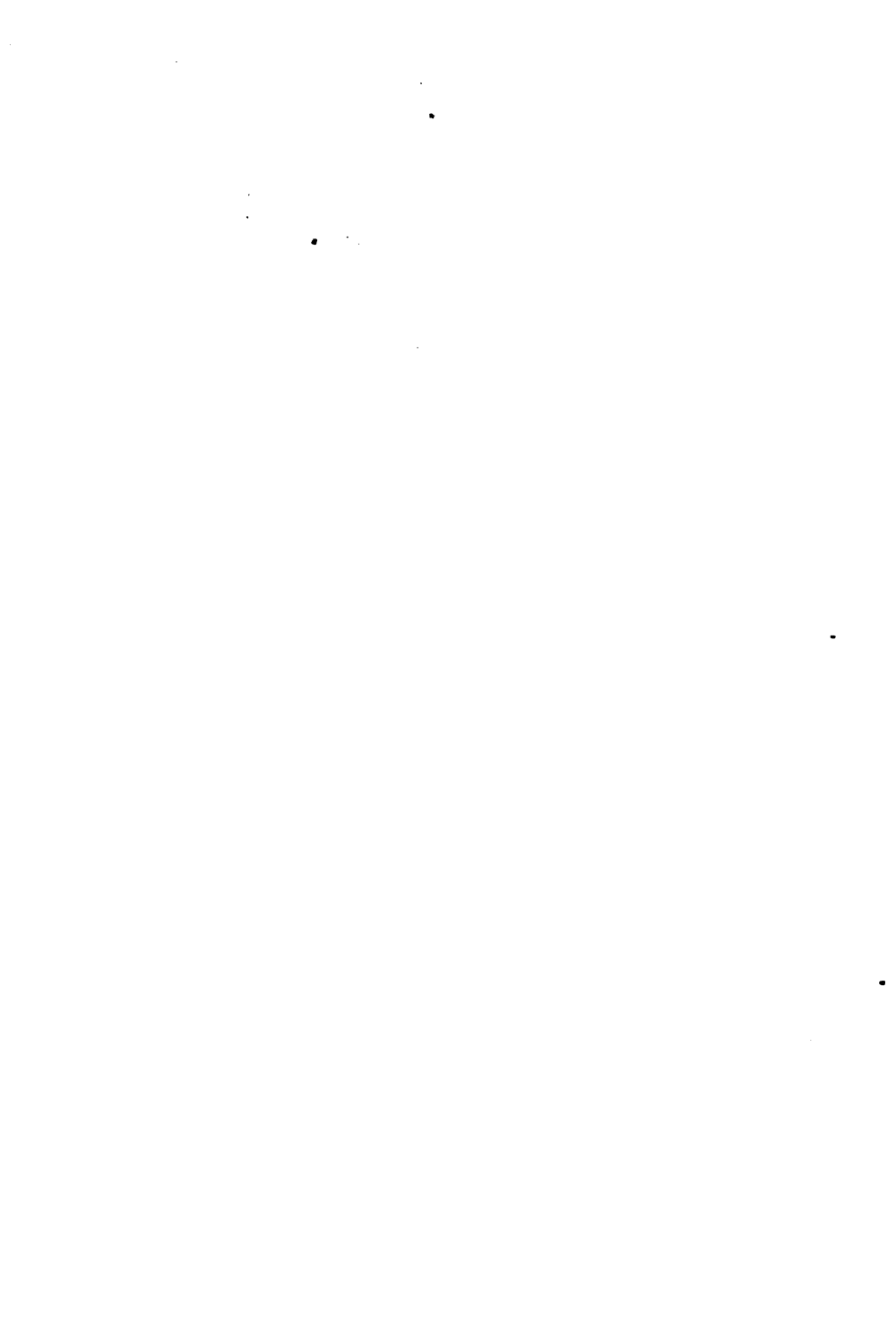
Before he was fifteen, he had read a natural philosophy twice through, as well as every other book he could lay his hands on. He had made an electrical machine, and startled his young friends by some sudden shocks. He had a bench for his special use, and a forge, where he made small cranes, pulleys, pumps, and repaired instruments used on ships. He was fond of astronomy, and would lie on his back on the ground for hours, looking at the stars.

Frail though he was in health, yet he must prepare himself to earn a living. When he was eighteen, with many tender words from his mother, her only boy started for Glasgow to learn the trade of making mathematical instruments. In his little trunk, besides his "best clothes," which were a ruffled shirt, a velvet waistcoat, and silk stockings, were a leather apron and some carpenter tools. Here he found a position with a man who sold and mended spectacles, repaired fiddles, and made fishing nets and rods.

Finding that he could learn very little in this shop, an old sea-captain, a friend of the family, took him to London. Here, day after day, he walked the streets, asking for a situation; but nobody wanted him. Finally



JAMES WATT



he offered to work for a watchmaker without pay, till he found a place to learn his trade. This he at last obtained with a Mr. Morgan, to whom he agreed to give a hundred dollars for the year's teaching. As his father was poorly able to help him, the conscientious boy lived on two dollars a week, earning most of this pittance by rising early, and doing odd jobs before his employer opened his shop in the morning. He labored every evening until nine o'clock, except Saturday, and was soon broken in health by hunger and overwork. His mother's heart ached for him, but, like other poor boys, he must make his way alone.

At the end of the year he went to Glasgow to open a shop for himself; but other mechanics were jealous of a new-comer, and would not permit him to rent a place. A professor at the Glasgow University knew the deserving young man, and offered him a room in the college, which he gladly accepted. He and the lad who assisted him could earn only ten dollars a week, and there was little sale for the instruments after they were made: so, following the example of his first master, he began to make and mend flutes, fiddles, and guitars, though he did not know one note from another. One of his customers wanted an organ built, and at once Watt set to work to learn the theory of music. When the organ was finished, a remarkable one for those times, the young machinist had added to it several inventions of his own.

This earning a living was a hard matter; but it brought energy, developed thought, and probably helped more than all else to make him famous. The world in general works no harder than circumstances compel.

Poverty is no barrier to falling in love, and, poor though he was, he now married Margaret Miller, his cousin, whom he had long tenderly loved. Their home was plain and small; but she had the sweetest of dispo-

sitions, was always happy, and made his life sunny even in its darkest hours of struggling.

Meantime he had made several intellectual friends in the college, one of whom talked much to him about a steam-carriage. Steam was not by any means unknown. Hero, a Greek physician who lived at Alexandria a century before the Christian era, tells how the ancients used it. Some crude engines were made in Watt's time, the best being that of Thomas Newcomen, called an atmospheric engine, and used in raising water from coal-mines. It could do comparatively little, however; and many of the mines were now useless because the water nearly drowned the miners.

Watt first experimented with common vials for steam-reservoirs, and canes hollowed out for steampipes. For months he went on working night and day, trying new plans, testing the powers of steam, borrowing a brass syringe a foot long for his cylinder, till finally the essential principles of the steam engine were born in his mind. He wrote to a friend, "My whole thoughts are bent on this machine. I can think of nothing else." He hired an old cellar, and for two months worked on his model. His tools were poor; his foreman died; and the engine, when completed, leaked in all parts. His old business of mending instruments had fallen off; he was badly in debt, and had no money to push forward the invention. He believed he had found the right principle; but he could not let his family starve. Sick at heart, and worn in body, he wrote: "Of all things in life, there is nothing more foolish than inventing." Poor Watt!

His great need was money,—money to buy food, money to buy tools, money to give him leisure for thought. Finally, a friend induced Dr. Roebuck an iron-dealer, to become Watt's partner, pay his debts of five thousand

dollars, take out a patent, and perfect the engine. Watt went to London for his patent, but so long was he delayed by indifferent officials, that he wrote home to his young wife, quite discouraged. With a brave heart in their pinching poverty, Margaret wrote back, "I beg that you will not make yourself uneasy, though things should not succeed to your wish. If the engine will not do, *something else will; never despair.*"

On his return home, for six months he worked in setting up his engine. The cylinder, having been badly cast, was almost worthless; the piston, though wrapped in cork, oiled rags, and an old hat, let the air in and the steam out; and the model proved a failure. "Today," he said, "I enter the thirty-fifth year of my life, and I think I have hardly yet done thirty-five pence worth of good in the world; but I cannot help it." The path to success was not easy.

Dr. Roebuck was getting badly in debt, and could not aid him as he had promised; so Watt went sadly back to surveying, a business he had taken up to keep the wolf from the door. In feeble health, out in the worst weather, his clothes often wet through, life seemed almost unbearable. When absent on one of these surveying excursions, word was brought that Margaret, his beloved wife, was dead. He was completely unnerved. Who would care for his little children, or be to him what he had often called her, "the comfort of his life"? After this he would often pause on the threshold of his humble home to summon courage to enter, since she was no longer there to welcome him. She had shared his poverty, but was never to share his fame and wealth.

And now came a turning-point in his life, though the struggles were by no means over. At Birmingham, lived Matthew Boulton, a rich manufacturer, eight years older than Watt. He employed over a thousand men in his

hardware establishment, and in making clocks, and reproducing rare vases. He was a friend of Benjamin Franklin, with whom he had corresponded about the steam-engine, and he had also heard of Watt and his invention through Dr. Roebuck. He was urged to assist. But Watt waited three years longer for aid. Nine years had passed since he made his invention; he was in debt, without business, and in poor health. What could he do? He seemed likely to finish life without any success.

Finally Boulton was induced to engage in the manufacture of engines, giving Watt one-third of the profits, if any were made. One engine was constructed by Boulton's men, and it worked admirably. Soon orders came in for others, as the mines were in bad condition, and the water must be pumped out. Fortunes, like misfortunes, rarely come singly. Just at this time the Russian Government offered Watt five thousand dollars yearly if he would go to that country. Such a sum was an astonishment. How he wished Margaret could have lived to see this proud day!

He could not well be spared from the company now; so he lived on at Birmingham, marrying a second time, Anne Macgregor of Scotland, to care for his children and his home. She was a very different woman from Margaret Miller; a neat housekeeper, but seemingly lacking in the lovable qualities which make sunshine even in the plainest home.

As soon as the Boulton and Watt engines were completed, and success seemed assured, obstacles arose from another quarter. Engines had been put into several Cornwall mines, which bore the singular names of "Ale and Cakes," "Wheat Fanny," "Wheat Abraham," "Cupboard," and "Cook's Kitchen." As soon as the miners found that these engines worked well, they determined to destroy the patent by the cry that Boulton and Watt

had a monopoly of a thing which the world needed. Petitions were circulated, giving great uneasiness to both the partners. Several persons also stole the principle of the engine, either by bribing the enginemen, or by getting them drunk so that they would tell the secrets of their employers. The patent was constantly infringed upon. Every hour was a warfare. Watt said, "The rascality of mankind is almost past belief."

Meantime Boulton, with his many branches of business, and the low state of trade, had gotten deeply in debt, and was pressed on every side for the tens of thousands which he owed. Watt was nearly insane with this trouble. He wrote to Boulton: "I cannot rest in my bed until these money matters have assumed some determinate form. I am plagued with the blues. I am quite eaten up with the milligrubs."

Soon after this, Watt invented the letter-copying press, which at first was greatly opposed, because it was thought that forged names and letters would result. After a time, however, there was great demand for it. Watt was urged by Boulton to invent a rotary engine; but this was finally done by their head workman, William Murdoch, the inventor of lighting by gas. He also made the first model of a locomotive, which frightened the village preacher nearly out of his senses, as it came puffing down the street one evening. Though devoted to his employers, sometimes working all night for them, they counselled him to give up all thought about his locomotive, lest by developing it he might in time withdraw from their firm. Alas for the selfishness of human nature! He was never made a partner, and, though he thought out many inventions after his day's work was done, he remained faithful to their service till the end of his life. Mr. Buckle tells this good story of Murdoch. Having found that fish-skins could be used in-

stead of isinglass, he came to London to inform the brewers, and took board in a handsome house. Fancying himself in his laboratory, he went on with his experiments. Imagine the horror of the landlady when she entered his room, and found her elegant wall-paper covered with wet fish-skins, hung up to dry! The inventor took an immediate departure with his skins. When the rotary engine was finished, the partners sought to obtain a charter, when lo! The millers and mealmen all opposed it, because, said they, "If flour is ground by steam, the wind and water mills will stop, and men will be thrown out of work." Boulton and Watt viewed with contempt this new obstacle of ignorance. "Carry out this argument," said the former, "and we must annihilate water-mills themselves, and go back again to the grinding of corn by hand labor." Presently a large mill was burned by incendiaries, with a loss of fifty thousand dollars.

Watt about this time invented his "Parallel Motion," and the governor, for regulating the speed of the engine. Large orders began to come in, even from America and the West Indies; but not till they had expended two hundred thousand dollars were there any profits. Times were brightening for the hard-working inventor. He lost his despondency, and did not long for death, as he had previously.

After a time, he built a lovely home at Heathfield, in the midst of forty acres of trees, flowers, and tasteful walks. Here gathered some of the greatest minds of the world,—Dr. Priestley who discovered oxygen, Sir William Herschel, Dr. Darwin, Josiah Wedgwood, and scores of others, who talked of science and literature. Mrs. Watt so detested dirt, and so hated the sight of her husband's leather apron and soiled hands, that he built for himself a "garret," where he could work unmolested

by his wife, or her broom and dustpan. She never allowed even her two pug dogs to cross the hall without wiping their feet on the mat. She would seize and carry away her husband's snuffbox, wherever she found it, because she considered snuff as dirt. At night, when she retired from the dining-room, if Mr. Watt did not follow at the time fixed by her, she sent a servant to remove the lights. If friends were present, he would say meekly, "We must go," and walk slowly out of the room. Such conduct must have been about as trying as the failure of his engines. For days together he would stay in his garret, not even coming down to his meals, cooking his food in his frying-pan and Dutch oven, which he kept by him. One cannot help wondering, whether, sometimes, as he worked up there alone, he did not think of Margaret, whose face would have brightened even that dingy room.

A crushing sorrow now came to him. His only daughter, Jessie, died, and then his pet son, Gregory, the dearest friend of Humphry Davy, a young man of brilliant scholarship and oratorical powers. Boulton died before his partner, loved and lamented by all, having followed the precept he once gave to Watt: "Keep your mind and your heart pleasant, if possible; for the way to go through life sweetly is not to regard rubs."

Watt died peacefully Aug. 19, 1819, in his eighty-third year, and was buried in beautiful Handsworth Church. Here stands Chantry's masterpiece, a sitting statue of the great inventor. Another is in Westminster Abbey. When Lord Brougham was asked to write the inscription for this monument, he said, "I reckon it one of the chief honors of my life." Sir James Mackintosh placed him "at the head of all inventors in all ages and nations"; and Wordsworth regarded him, "Considering both the magnitude and the universality of his genius,

as perhaps the most extraordinary man that this country has ever produced."

After all the struggle came wealth and fame. The mine opens up its treasures only to those who are persevering enough to dig into it; and life itself yields little, only to such as have the courage and the will to overcome obstacles.

Heathfield has passed into other hands; but the quiet garret is just as James Watt left it at death. Here is a large sculpture machine, and many busts partly copied. Here is his handkerchief tied to the beam on which he rested his head. The beam itself is crumbling to dust. Little pots of chemicals on the shelves are hardened by age. A bunch of withered grapes is on a dish, and the ashes are in the grate as when he sat before it. Close by is the hair trunk of his beloved Gregory, full of his schoolbooks, his letters, and his childish toys. This the noble old man kept beside him to the last.



WOLFGANG A. MOZART



WOLFGANG MOZART

THE quaint old city of Salzburg, Austria, built into the mountain-side, is a Mecca for all who love music, and admire the immortal Mozart. When he was alive, his native city allowed him nearly to starve; when he was dead, she built him a beautiful monument, and preserved his home, a plain two-story, stuccoed building, for thousands of travellers to look upon sadly and tenderly. Wolfgang Amadeus Mozart was born Jan. 27, 1756, a delicate, sensitive child, who would ask a dozen times a day whether his friends loved him, and, if answered in the negative, would burst into tears. At three, he began to show his passion for music. He would listen intensely as his father taught his little sister, Nannerl, seven years old; would move his playthings from one room to another, to the sound of the violin; and at four, composed pieces which astonished his sire.

Two years later, the proud father took Wolfgang and his sister on a concert tour to Vienna. So well did the boy play, that the Empress Maria Theresa held him in her arms, and kissed him heartily. One day as he was walking between two of her daughters, he slipped on the polished floor and fell. Marie Antoinette, afterward Empress of France, raised him up, whereupon he said, "You are very kind; I will marry you." The father was alarmed at this seeming audacity; but the lovely princess playfully kissed him.

The next year he was taken to Paris, and here two sets of sonatas, the works of a boy of seven, were

brought out, dedicated to Marie Antoinette. The children sat at the royal table, poems were written about them, and everywhere they excited wonder and admiration; yet so excessively modest was young Mozart, that he cried when praised too much. In London, Bach took the boy between his knees, and alternately they played his own great works and those of Handel at sight. Royalty gave them "gold snuffboxes enough to set up a shop," wrote home the father; "but in money. I am poor." Wolfgang was now taken ill of inflammatory fever; but he could not give up his music. A board was laid across the bed, and on this he wrote out his thoughts in the notes. Finally, with ardor dampened at their lack of pecuniary success, Leopold Mozart took his dear ones back to quiet Salzburg.

Here the cold archbishop, discrediting the reports of the boy's genius, shut him up alone for a week to compose an oratorio, the text furnished by himself. Mozart, only ten years old, stood the test brilliantly. The next year a second tour was taken to Vienna, to be present at the marriage of the Archduchess Maria Josepha. The bride died from small-pox shortly after their arrival; and poor Wolfgang took the disease, and was blind for nine days. When he recovered, the musicians, moved by envy and jealousy, would not be outdone by a boy of twelve, who was equally at home in German or Italian opera, and determined to hiss off the stage whatever he might compose. Sad at heart, and disappointed, again the Mozarts went back to the old home.

Two years later, after much self-sacrifice, the father took his boy to Italy for study. The first day in Passion Week they went to the Sistine Chapel to hear the famous "Miserere" of Allegri, which was considered so sacred, that the musicians were forbidden to take home any part of it, or copy it out of the chapel, on pain of excom-

munication. Wolfgang, as soon as he reached his lodgings, wrote it out from memory; which remarkable feat for a boy of fourteen astonished all Rome. So wonderfully did he play, that the audience at Naples declared there was witchcraft in the ring which he wore on his left hand, and he was obliged to remove it. At Milan, when he was nearly fifteen, he composed the opera "Mithridate," conducting it himself, which was given twenty nights in succession to enthusiastic audiences. After this came requests for operas from Maria Theresa, Munich, and elsewhere. He was busy every moment. Overworked, he was often ill; but the need for money to meet heavy expenses made constant work a necessity. All this time he wrote beautiful letters to his mother and sister. "Kiss mamma's hand for me a thousand billion times," is the language of his loving heart. He could scarcely be said to have had any childhood; but he kept his tenderness and affection to the last of his life.

After their return to Salzburg, finding the new archbishop even less cordial than the old—the former had allowed Wolfgang the munificent salary of five dollars and a quarter yearly!—it was deemed wise to try to find a new field for employment. The father, now sixty years of age, must earn a pittance for the family by giving music-lessons, while the mother accompanied the son to Paris. The separation was a hard one for the devoted father, who could not say good-bye to his idolized son, and poor Nannerl wept the whole day long. Mozart, now twenty-one, and famous, well repaid this affection by his pure character. He wrote: "I have God always before me. Whatever is according to his will is also according to mine; therefore I cannot fail to be happy and contented."

Stopping for a time at Mannheim, he attempted to gain the position of tutor to the elector's children, but was

disappointed. Here he fell in love with Aloysia Weber, a pretty girl of fifteen, whose father, a prompter at the National Theatre, earned only two hundred dollars yearly for the support of his wife and six children. The girl had a fine voice; and Mozart, blinded by love, asked no higher joy than to write operas in which she might be the star. The good old father, who had spent all his life in helping his son to win fame, was nearly heartbroken when he learned of this foolish affection, and wrote him tenderly but firmly: "Off with you to Paris; get the great folks on your side; *aut Cæsar, aut nihil*. From Paris, the name and fame of a man of great talent goes through the whole world."

The young man, carrying out his childish motto, "God first, and then papa," reluctantly started for Paris. Here he did not meet with great success, for scores of applicants waited for every position. His loving mother soon died, perhaps from over economy in her cold, dark lodgings; and the young musician took his lonely way back to Salzburg, begging his father's consent to his stopping at Mannheim to see the Webers. Finding that Aloysia had gone upon the stage at Munich, he hastened to see her. She had been offered a good salary. Meantime Mozart had won no new laurels at Paris. He was small in stature, and poor; and the girl who wept at his departure a few months previously professed now scarcely to have seen his face before. The young lover, cut to the heart, yet proud, seated himself at the piano, and played,

"I leave the girl gladly who cares not for me,"

and then hastened away to Salzburg. Aloysia married a comedian, and lived a most unhappy life, gaining some fame from singing the music which Mozart wrote for her.

He remained at home for a year and a half, till called to Munich to write the opera "Idomeneo," and later to Vienna. Here, unfortunately, he met the Webers again, and, their father having died, he boarded in their house, and gave lessons to Constance, a younger sister of Aloysia. She was a plain, good-hearted girl, without much energy, but with a great appreciation of her gifted teacher. The result came naturally; he fell in love with the penniless girl, and, despite the distress of his aged father at his choice, married her when he was twenty-six and she eighteen.

Henceforward there was no hope of anything save the direst poverty. To marry without love is a grave mistake; to marry simply for love is sometimes a mistake equally grave. He could of course do nothing now for his aged father or sister. Unsteady employment, a rapidly-increasing family, and a wife ill most of the time, made the struggle for existence ten times harder than before his marriage. Once when he had prepared to visit his father for the first time after the wedding, and had waited months for the necessary funds, he was arrested for a debt of fifteen dollars, just as he was stepping into the carriage.

The Emperor Joseph said to him one day, "Why did you not marry a rich wife?" With dignity Mozart at once replied, "Sire, I trust that my genius will always enable me to support the woman I love"; but unfortunately it did not. He wrote after his marriage: "The moment we were made one, my wife as well as myself began to weep, which touched every one, even the priest, and they all cried when they witnessed how our hearts were moved." How little they dreamed that they should weep more seriously when hunger stared their six children in the face!

From the time of his marriage till his death, nine years,

says Rev. Mr. Haweis, "his life can be compared to nothing but a torch burning out rapidly in the wind." It was a period of incessant, astonishing labor. He dedicated six quartets to his dear friend Joseph Haydn, who said, "Mozart is the greatest composer who has ever lived"; wrote "Figaro" when he was twenty-nine, which had the greatest popularity, "Don Giovanni" at thirty-one, and the "Flauto Magico" gratis, for the benefit of the theatre director, who was in want. The two latter creations were hailed with delight. Goethe wrote to Schiller later of "Don Giovanni," "That piece stands entirely alone; and Mozart's death has rendered all hope of any thing like it idle."

Whenever he appeared at the theatre, he was called upon the stage from all parts of the house; yet all this time he could not earn enough to live. He received only a hundred dollars from his "Don Giovanni," and less for the others. He gave lessons every hour he could spare, concerts in the open air, borrowed from his friends, scrimped himself, to send money to his sick wife at Baden, pawned his silver plate to make one more unsuccessful journey to win the aid of indifferent princes, and fainted often at his tasks after midnight. Still he wrote to "the best and dearest wife of my heart," "If I only had a letter from you, all would be right," and promised her to work harder than ever to earn money.

When Constance was at home with him, if he left her in the morning before she awakened, he would leave a note for her with the words, "Good-morning, my darling wife. I shall be at home at—o'clock precisely." Once when she had been ill for eight months, and Mozart was composing beside her as she slept, suddenly a noisy messenger entered. Alarmed lest his wife should be disturbed, he rose hastily, when the penknife in his hand fell, and buried itself in his foot. Without a word

escaping his lips, he left the room, a surgeon was called, and, though lame for some time, the wife was not told of the accident.

His compositions found few purchasers, for the people generally could not comprehend them. Publishers' shops closed to him, unless he would write in the popular style. "Then I can make no more by my pen," he said bitterly, "and I had better starve and go to destruction at once." So poor had his family become, that, with no fuel in the house, he and his wife were found by a friend waltzing to keep warm.

About this time a sepulchral-looking man called to ask that a "Requiem" be written on the death of the wife of an Austrian nobleman, who was to be considered the author, and thus his intense grief be shown, though manifested through a lie. Mozart consulted with his wife, as was his custom, and, as she indorsed it, he accepted the commission for fifty dollars. Overworked, harassed by debts which he could not pay, hurt at the jealousies and intrigues of several musicians, disappointed at the reception of his new opera at Prague, his hopeful nature forsook him, and he told Constance that the "Requiem" would be written for himself.

In the midst of this wretchedness their sixth child was born. The poor wife forgot her own sorrows, and prevailed upon him to give up work for a time; but the active brain could not rest, and he wrote as he lay on his sick-bed. On the day before he died, Dec. 4, 1791, at two o'clock, he persisted in having a portion of the "Requiem" sung by the friends who stood about his bed, and, joining with them in the alto, burst into tears, saying, "Did I not say that I was writing the 'Requiem' for myself?" Soon after he said, "Constance, oh that I could only hear my 'Flauto Magico'!" and a friend playing it, he was cheered.

A messenger now arrived to tell him that he was appointed organist at St. Stephen's Cathedral, a position for which he had longed for years; but it came too late. Death was unwelcome to him. "Now must I go," he said, "just as I should be able to live in peace; I must leave my family, my poor children, at the very instant in which I should have been able to provide for their welfare." Cold applications were ordered by the physicians for his burning head; he became delirious for two hours, and died at midnight, only thirty-five years old. Constance was utterly prostrated, and threw herself upon his bed, hoping to die also.

Mozart's body was laid beside his piano, and then, in a pouring rain, buried in a "common grave," in the plainest manner possible, with nobody present except the keepers of the cemetery. Weeks after, when the wife visited the spot, she found a new grave-digger, who could not tell where her beloved husband was buried, and to this day the author of fourteen Italian operas, seventeen symphonies, and dozens of cantatas and serenades, about eight hundred compositions in all, sleeps in an unknown grave. The Emperor Leopold aided her in a concert to raise fifteen hundred dollars to pay her husband's debts, and provide a little for herself. Eighteen years afterward she married the Danish councillor, Baron von Missen, who educated her two sons, four other children having died. Salzburg waited a half-century before she erected a bronze statue to her world-renowned genius, in the Square of St. Michael; and, seventy years after his death, Vienna built him a monument in the Cemetery of St. Mark. History scarcely furnishes a more pathetic life. He filled the world with music, yet died in want and sorrow.

JEAN PAUL RICHTER

VASARI, who wrote the lives of the Italian painters, truly said, "It is not by sleeping, but by working, waking, and laboring continually, that proficiency is attained and reputation acquired." This was emphatically true of Richter, as it is of every man or woman who wins a place in the memory of men. The majority die after a commonplace life, and are never heard of; they were probably satisfied to drift along the current, with no special purpose, save to eat, drink, and be merry.

Not so with the German boy, born in the cold Pine Mountains of Bavaria. His home was a low, thatched building, made of beams of wood, filled in with mortar, one part for the family, and the other for corn and goats. This is still the custom in Switzerland, the poor caring as tenderly for their dumb beasts as for their children. Jean Paul was born on the 21st of March, 1763: "My life and the life of the spring began the same month," he used to say in after years, and the thought of robin red-breasts and spring flowers made the poor lad happy amid the deepest trials.

His father was an under-pastor and organist in the little village of Wunsiedel, and lived on a pitiful salary; but, generous to a fault, he stripped off his own garments to clothe the poor, and sent the schoolmaster a meal every day, because, if possible, he was poorer than the preacher. In school, Jean Paul was a studious boy, almost envying every one who said his lessons well, and fond of his teachers and mates; but one of the boys having cut Paul's

hand, the father at once took him home and became his instructor. A painstaking and conscientious man, he showed little aptness for his work, when he gave his boy, at nine years of age, a Latin dictionary to commit to memory! For four solid hours in the morning, and three in the afternoon, Paul and his brother learned grammatical lessons and Latin verses of which they did not understand a word. Still the boy grew more and more fond of books, and of Nature,—made clocks with pendulums and wheels; a sun-dial, drawing his figures on a wooden plate with ink; invented a new language from the calendar signs of the almanac; and composed music on an old harpsichord whose only tuning-hammer and tuning-master were the winds and the weather.

When Paul was thirteen, the family moved to Schwarzenbach, where he made the acquaintance of a young pastor, Vogel, who owned quite a valuable library, and encouraged him to educate himself. Given free access to the books, he began to read eagerly. Thinking that he should never own volumes for himself, he made blank-books, of three hundred pages each, from his father's sermon-paper, and began the almost interminable labor of copying whatever he thought he should need in law, medicine, philosophy, theology, natural history, and poetry. For nearly four years he worked thus, till he had quite a library of his own, and a wealth of information in his brain, which proved invaluable in the writing of after years. Such a boy could not fail of success.

Paul's father, meantime, had become despondent over his debts, small though they were, and died when his son was sixteen. The grandfather on the mother's side dying soon after, Frau Richter became entitled by will to his property. The remaining brothers and sisters at once went to law about the matter, preferring to spend the estate in the courts rather than have a favorite child

enjoy it. Two years later, at eighteen, Paul started for college at Leipzig, hoping that in this cultured city he might teach while pursuing his own studies. Alas! scores had come with the same hope, and there was no work to be obtained. He found himself alone in a great city, poorly dressed, timid, sensitive, and without a hand to help. Many boys had brought letters of introduction to the professors, and thus of course received attention. He wrote to his mother, "The most renowned, whose esteem would be useful to me, are oppressed with business, surrounded by a multitude of respectable people, and by a swarm of envious flatterers. If one would speak to a professor without a special invitation, he incurs the suspicion of vanity. But do not give up your hopes. I will overcome all these difficulties. I shall receive some little help, and at length I shall not need it." All honor to the brave boy who could write so encouragingly in the midst of want and loneliness!

He longed to make the acquaintance of some learned people, but there was no opportunity. Finally, getting deeper and deeper into debt, he wrote to his mother, "As I have no longer any funds, I must continue to be trusted. But what can I at last expect? I must eat, and I cannot continue to be trusted. I cannot freeze, but where shall I get wood without money? I can no longer take care of my health, for I have warm food neither morning nor evening. It is now a long time since I asked you for twenty-six dollars; when they come, I shall scarcely be able to pay what I already owe. Perhaps the project I have in my head will enable me to earn for you and myself." Poor lad! how many hearts have ached from poverty just as did his. The mother was also in debt, but in some way she managed to obtain the money; for what will a mother not do for her child?

Paul worked on, but was soon in debt again. He

could tell nobody but his devoted mother: "I will not ask you for money to pay my victualler," he wrote, "to whom I owe twenty-four dollars; nor my landlady to whom I am indebted ten; or even for other debts, that amount to six dollars. For these great sums I will ask no help, but for the following you must not deny me your assistance. I must every week pay the washerwoman, who does not trust. I must drink some milk every morning. I must have my boots soled by the cobbler, who does not trust; my torn cap must be repaired by the tailor, who does not trust; and I must give something to the maid-servant, who of course does not trust. Eight dollars of Saxon money will satisfy all, and then I shall need your help no longer."

He was keeping up courage, because he was writing a book! He told his mother, with his high dreams of young authorship, that he should bring home all his old shirts and stockings at vacation, for he should buy new ones then! It is well that all the mountains seem easy to climb in youth; when we are older, we come to know their actual height. The mother discouraged authorship, and hoped her boy would become a preacher; but his project was too dear to be given up. When his book of satirical essays, called "Eulogy of Stupidity," was finished, it was sent, with beating heart, to a publisher. In vain Paul awaited its return. He hoped it would be ready at Michaelmas fair, but the publisher "so long and so kindly patronized the book by letting it lie on his desk, that the fair was half over before the manuscript was returned." The boyish heart must have ached when the parcel came. He had not learned, what most authors are familiar with, the heart sickness from first rejected manuscripts. He had not learned, too, that fame is a hard ladder to climb, and that a "friend at court" is often

worth as much, or more, than merit. Publishers are human, and cannot always see merit till fame is won.

For a whole year Paul tried in vain to find a publisher. Then he said to the manuscript, "Lie there in the corner together with school exercises, for thou art no better. I will forget, for the world would certainly have forgotten thee." Faint from lack of food, he says, "I undertook again a wearisome work, and created in six months a brand-new satire." This book was called the "Greenland Lawsuits," a queer title for a collection of essays on theology, family pride, women, fops, and the like.

Paul had now gained courage by failure. Instead of writing a letter, he went personally to every publisher in Leipzig, and offered his manuscript, and every publisher refused it. Finally he sent it to Voss of Berlin. On the last day of December, as he sat in his room, hungry, and shivering because there was no fire in the stove, there was a knock at the door, and a letter from Voss was handed in. He opened it hastily, and found an offer of seventy dollars for the "Greenland Lawsuits." Through his whole life he looked back to this as one of its supreme moments. It was not a great sum, only three dollars a week for the six months, but it was the first fruit of his brain given to the public. He was now nineteen. What little property the mother had possessed had wasted away in the lawsuits; one brother in his despair had drowned himself, and another had entered the army; but Paul still had hope in the future.

After a short vacation with his mother, he went back to Leipzig. The second volume of the "Greenland Lawsuits" was now published, and for this he received one hundred and twenty-six dollars,—nearly twice that given for the first volume. This did not take with the public, and the third volume was refused by every publisher.

His money was gone. What could he do? He would try, as some other authors had done, the plan of writing letters to distinguished people, telling them his needs. He did so, but received no answers. Then, spurred on by necessity, he took the manuscript in his hand, and presented it himself at the doors of the learned; but he was either not listened to, or repulsed on every occasion. How one pities this lad of nineteen! How many wealthy men might have aided him, but they did not! He wrote a few essays for various periodicals, but these brought little money, and were seldom wanted. His high hopes for a literary career began to vanish.

It was evident that he must give up college life for he could not get enough to eat. He had long discontinued his evening meal, making his supper of a few dried prunes. His boarding-mistress was asking daily for her dues. He could bear the privation and the disgrace no longer, and, packing his satchel, and borrowing a coat from a college boy, that he might not freeze, he stole away from Leipzig in the darkness of the twilight, and went home to his disconsolate mother. Is it any wonder that the poor are disconsolate? Is it any wonder that they regard the wealthy as usually cold and indifferent to their welfare? Alas! that so many of us have no wish to be our "brother's keeper."

Perhaps some of the professors and students wondered where the bright lad had gone; but the world forgets easily. Frau Richter received her college boy with a warm heart, but an empty purse. She was living with her two children in one room, supporting them as best she could by spinning, working far into the night. In this room, where cooking, washing, cleaning, and spinning were all carried on, Paul placed his little desk and began to write. Was the confusion trying to his thoughts? Ah! necessity knows no law. He says, "I was like a

prisoner, without the prisoner's fare of bread and water, for I had only the latter; and if a gulden found its way into the house, the jubilee was such that the windows were nearly broken with joy." But with the strength of a noble and heroic nature, he adds, "What is poverty that a man should whine under it? It is but like the pain of piercing the ears of a maiden, and you hang precious jewels in the wound."

The family were so needy, however, that they must look somewhere for aid, and hesitatingly Paul applied to Vogel, the young pastor, who loaned them twenty-five gulden. Very soon the boarding-mistress from Leipzig appeared, having walked the whole way to Hof, and demanded her pay. In his distress Paul sent her to another friend, Otto, who became surety for the debt.

Richter now began to work harder than ever. His books of extracts were invaluable, as were his hand-books of comical matters, touching incidents, synonyms, etc. He made it a rule to write half a day, and take long walks in the afternoon in the open air, thinking out the plans for his books. Poor as he was, he was always cheerful, sustaining by his letters any who were down-hearted. One of his best friends, Herman, who had become a physician through much struggle, died about this time, broken on the wheel of poverty. Despite his own starving condition, Paul sent him five dollars. Having an opportunity to teach French to the brother of a Leipzig friend, he accepted; but at the end of three years, through the disappointing character of the pupil, and the miserliness of the father, Paul returned to his mother, broken in health and dispirited. His heart ached for those who like himself were suffering, and now he made a resolution that changed for life the course of his writing. He would write satire no more. He said, "I will not pour into the cup of humanity a single drop of gall."

Henceforward love, and hope, and tenderness, breathe upon his every page.

He now wrote ten essays on "What is Death?" asking the noble-hearted Herder to send them to Wieland for his magazine, lest they be overlooked in his mass of papers, if Richter, unaided, should venture to ask the favor. They were overlooked for months; but finally Herder procured the insertion of one essay in a different magazine, but Richter never received any pay for it. Three years had passed, and all this time the third volume of the "Greenland Lawsuits" had been journeying from one publishing house to another. At last it was accepted, but little money came from it.

Again he taught,—this time at Schwarzenbach, where he used to go to school. Here his tenderness, his tact, and good cheer won the hearts of the pupils. There was no memorizing Latin dictionaries, but the exact work of all was kept in a "red book" for parents to see. He instructed them orally five hours a day, till they were eager for astronomy, history, and biography. For four years he taught, "his schoolroom being his Paradise," every Sunday walking to Hof to see his mother. Well might he say, "To the man who has had a mother all women are sacred for her sake."

Paul now determined to write a novel, and though he had little knowledge of any sphere of life save that in which poverty held sway, he would put his own heart into the work. The "Invisible Lodge" was written and sent to the Counsellor of the town, asking, if the work pleased him, that he would assist in its publication. At first Counsellor Moritz was annoyed at the request; but as he read he became deeply interested, and said, this is surely from Goethe, Herder, or Wieland. The book was soon published, and two hundred and twenty-six dollars paid for it! The moment Richter received the first in-

stalment of seventy dollars, he hastened to Hof, and there, late at night, found his mother spinning by the light of the fire, and poured the whole of the gold into her lap. The surprise, joy, and thanksgiving of the poor woman can well be imagined. Her son immediately moved her into a small but more comfortable home.

The new novel began to be talked about and widely read. Fame was really coming. He began at once to work on "Hesperus," one of his most famous productions, though when published he received only two hundred dollars for the four volumes. Letters now came from scholars and famous people. One admirer sent fifty Prussian dollars. What joy must have swelled the heart of the poor schoolteacher! "Flower, Fruit, and Thorn Pieces" followed shortly after, and Richter was indeed famous. Learned ladies of Weimar wrote most enthusiastic thanks. With his reverence for woman and delight in her intellectual equality with man, these letters were most inspiring. Request after request came for him to visit Weimar. Dare he go and meet such people as Goethe, and Schiller, and Herder, and Wieland, whom for twelve long years he had hoped sometime to look upon? At last he started, and upon reaching Weimar, was made the lion of the day. His warm heart, generous and unaffected nature, and brilliant and well-stored mind made him admired by all. Herder said: "Heaven has sent me a treasure in Richter. That I neither deserved nor expected. He is all heart, all soul; an harmonious tone in the great golden harp of humanity." Caroline Herder, his wife, a very gifted woman, was equally his friend and helper. Noble and intellectual women gathered about him to do him honor. Some fell in love with him; but he studied them closely as models for future characters in his books, giving only an ardent friendship in return. He was even invited to court, and

gathered here the scenes for his greatest work, "Titan." How grand all this seemed to the poor man who had been hungering all his life for refined and intellectual companionship! So rejoiced was he that he wrote home, "I have lived twenty years in Weimar in a few days. I am happy, wholly happy, not merely beyond all expectation, but beyond all description."

He was now thirty-four. The poor, patient mother had just died, but not till she had heard the fame of her son spoken on every hand. After her death, Paul found a faded manuscript in which she had kept the record of those small gains in spinning into the midnight hours. He carried it next his heart, saying, "If all other manuscripts are destroyed, yet will I keep this, good mother." For weeks he was not able to write a letter, or mention the loss of his parent.

His youngest brother, Samuel, a talented boy, was now ready for college; so Jean Paul determined to make Leipzig his home while his brother pursued his course. What changes the last few years had wrought! Then he was stealing away from Leipzig in debt for his board, cold, hungry, and desolate; now he was coming, the brilliant author whom everybody delighted to honor. When we are in want, few are ready to help; when above want, the world stands ready to lavish all upon us. After spending some time in Leipzig, he visited Dresden to enjoy the culture of that artistic city. During this visit, Samuel, who had become dissipated, broke into his brother's desk, stole all his hard-earned money, and left the city. He led a wandering life thereafter, dying in a hospital in Silesia. Paul never saw him again, but sent him a yearly allowance, as soon as he learned his abiding-place. What a noble character!

He now returned to Weimar, dedicating his "Titan" to the four daughters of the Duke of Mecklenburg, one

of whom, the famous and beautiful Louise of Prussia, became the mother of Emperor William. He visited her later in Berlin, where he writes, "I have never been received in any city with such idolatry. I have a watch-chain of the hair of three sisters; and so much hair has been begged of me, that if I were to make it a traffic, I could live as well from the outside of my head as from what is inside of it."

In this city he met the woman who was to be hereafter the very centre of his life. He had had a passing fancy for several, but never for one that seemed fitted, all in all, to make his life complete. Caroline Myer, the daughter of one of the most distinguished Prussian officers, was a refined, intellectual, noble girl, with almost unlimited resources within herself, devoted to her family and to every good. Paul had met women who dressed more elegantly, who were more sparkling in conversation, who were more beautiful, but they did not satisfy his heart. In his thirty-eighth year he had found a character that seemed perfection. He wrote, "Caroline has exactly that inexpressible love for all beings that I have till now failed to find even in those who in everything else possess the splendor and purity of the diamond. She preserves in the full harmony of her love to me the middle and lower tones of sympathy for every joy and sorrow in others."

Her love for Richter was nearly adoration. Several months after their marriage she wrote her father, "Richter is the purest, the holiest, the most godlike man that lives. Could others be admitted, as I am, to his inmost emotions, how much more would they esteem him!" Richter also wrote to his best friend, Otto, "Marriage has made me love her more romantically, deeper, infinitely more than before." At the birth of their first child, he wrote again to Otto, "You will be as trans-

ported as I was when the nurse brought me, as out of a cloud, my second love, with the blue eyes wide open, a beautiful, high brow, kiss-lipped, heart-touching. God is near at the birth of every child."

On Caroline's first birthday after their marriage, he wrote, "I will be to thee father and mother! Thou shalt be the happiest of human beings, that I also may be happy."

"Titan," now ten years in progress, was published, and made a great sensation. The literary world was indignant at the fate of "Linda," his heroine, but all pronounced it a great book,—his masterpiece.

Soon after he removed to Bayreuth, and settled down to earnest work. Almost every day he might be seen walking out into the country, where he rented a room in a peasant's house for quiet and country air. Whenever the day was pleasant he worked out of doors. A son had now been born to him, and life seemed complete. Now he played with his home-treasures, and now talked at table about some matter of art or science that all might be instructed. He was especially fond of animals, having usually a mouse, a tame spider, a tree-frog, and dogs. So good was he to his canary birds that he never left the house without opening the door of their cage that they might fly about and not be lonely. Often when he wrote, they walked over his manuscript, scattering water from the vase and mingling it with his ink.

His son Max, a boy of sixteen, had entered school at Munich. He was a beautiful youth, conscientious, sensitive, devoted to study, and the idol of the household. At first he wept whole nights from homesickness, denying himself sufficient fire, food, and clothing, from a desire to save expense to his parents. He was a fine scholar, but distrusted his intellectual gifts. At the end

of a year he came home, pale and worn, and died at the age of nineteen.

To Richter this was a death-blow. He went on writing, while the tears dropped upon his page. He could never bear the sight of a book his boy had touched, and the word "philology," his son's favorite study, cut him to the heart. At the end of three months he wrote to a friend, "My being has suffered not merely a wound, but a complete cutting off of all joy. My longing after him grows always more painful." Broken in health, he visited Dresden; but the end was near. The sight of the left eye at first failed him, then the right, till he was left in complete darkness. He still hoped to finish his autobiography, and the "Immortality of the Soul," begun on the very day Max was buried; but this was denied him. Once only did his sorrows overpower him, when pitifully looking toward the window, he cried out as Ajax in the "Iliad":—

"Light! light only, then may the enemy come!"

The devoted wife and two daughters grew unspeakably dear to him. When tired with thinking, he would seat himself at the piano, and play till he, as well as those who heard him, would burst into tears. On the 14th of November, 1825, he sat in his chamber, his youngest child climbing on the back of his chair, and laying her face against her father's. It was only noon, but thinking it was night, Richter said, "It is time to go to rest." He was wheeled into his sleeping apartment, and some flowers laid on the bed beside him. "My beautiful flowers! My lovely flowers!" he said, as he folded his arms, and soon fell asleep. His wife sat beside him, her eyes fixed on the face of the man she loved. About six the doctor arrived. The breath came shorter,

and the face took on a heavenly expression, and grew cold as marble. The end had come. He was buried by torchlight, the unfinished manuscript of the "Immortality of the Soul" being borne upon his coffin, while the students sang Klopstock's hymn, "Thou shalt arise, my Soul." His more than one hundred volumes and his noble, generous life are his monuments. He said, "I shall die without having seen Switzerland or the ocean, but the ocean of eternity I shall not fail to see."

JOSEPH MARIE JACQUARD

THE small world which lives in elegant houses knows little of the great world in dingy apartments with bare walls and empty cupboards. Those who walk or ride in the sunshine often forget the darkness of the mines, or the tiresome treadmill of the factories.

Over a century ago, in Lyons, France, lived a man who desired to make the lives of the toilers brighter and happier. Joseph Jacquard, the son of a silkweaver who died early, began his young manhood, the owner of two looms and a comfortable little home. He had married Claudine Boichon, the daughter of a goldsmith who expected to give his daughter a marriage portion, but was unable from loss of property. Jacquard loved her just as devotedly, however, as though she had brought him money. A pretty boy was born into their home, and no family was happier in all France. But the young loom-owner saw the poor weavers working from four in the morning till nine at night, in crowded rooms, whole families often bending over a loom, their chests shrunken and their cheeks sallow from want of air and sunlight; and their faces dull and vacant from the monotony of unvaried toil. There were no holidays, no walks in the fields among the flowers, no reading of books, nothing but the constant routine which wore out body and mind together. There was no home-life; little children grew pinched and old; and mothers went too early to their graves. If work stopped, they ate the bread of charity, and went to the almshouse. The rich

people of Lyons were not hard-hearted, but they did not *think*; they were too busy with their parties and their marriages; too busy buying and selling that they might grow richer. But Jacquard was always thinking how he could lighten the labor of the silkweavers by some invention.

The manufacture of silk had become a most important industry. Seventeen hundred years before Christ the Chinese had discovered the making of silk from silk-worms, and had cultivated mulberry trees. They forbade anybody to export the eggs or to disclose the process of making the fabric, under penalty of death. The Roman Emperor Justinian determined to wrest this secret from China, and thus revive the resources of his empire. He sent two monks, who ostensibly preached Christianity, but in reality studied silk-worms, and, secreting some eggs in two hollow reeds, returned to Justinian, and breaking these canes, laid the eggs on the lap of the beautiful Empress Theodora. From this the art spread into Italy, and thence into France.

The more Jacquard thought how he could help the silkweavers of France the more he became absorbed, and forgot that money was needed to support his family. Soon the looms had to be sold at auction, with his small home. The world ridiculed, and his relatives blamed him; but Claudine his wife encouraged him, and prophesied great fame for him in the future. She sold her little treasures, and even her bed, to pay his debts. Finally, when there was no food in the house, with tears in his eyes, Jacquard left his wife and child, to become a laborer for a lime-burner in a neighboring town. Claudine went to work in a straw-bonnet factory; and for sixteen years they battled with poverty.

Then the French Revolution burst upon Lyons in 1793. Her crime before such murderers as Robespierre and

Marat was that she was the friend of Louis XVI. Sixty thousand men were sent against her by the so-called Republicans, who were commanded to utterly destroy her, and write over the ruins, "Lyons made war upon liberty; Lyons is no more." Six thousand persons were put to death, their houses burned, and twelve thousand exiled; among them Jacquard.

His only child, a brave boy of sixteen, had joined the Republican ranks, that he might fight against the foreign armies of England, Austria, and Naples, who had determined, under Pitt, to crush out the new government. At the boy's earnest request his father enlisted with him, and together they marched toward the Rhine. In one of the first battles a cannon-ball struck the idolized son, who fell expiring in Jacquard's arms. Covered with the blood of his only child, he dug a grave for him on the battle-field; and exhausted and heart-broken went to the hospital till his discharge was obtained.

He returned to Lyons and sought his poor wife. At last he found her in the outskirts of the city, living in a hay-loft, and earning the barest pittance by spreading out linen for the laundresses to dry. She divided her crusts with her husband, while they wept together over their irreparable loss. She soon died of grief, but, with her last words, bade Jacquard go forward in developing his genius, and have trust in God, who would yet show him the way of success. Blessed Claudine! A sweet, beautiful soul, shining like a star in the darkness of the French Revolution.

Jacquard with all earthly ties severed went back to the seclusion of inventing. After his day's work was done as a laborer, he studied on his machine for silk-weaving. Finally, after seven years,—a long time to patiently develop an idea,—he had produced a loom which would decrease the number of workmen at each

machine, by one person. The model was placed at the Paris Industrial Exposition in 1801; and the maker was awarded a bronze medal. In gratitude for this discovery he went to the image of the Virgin which stood on a high hill, and for nine days ascended daily the steps of the sacred place. Then he returned to his work, and seating himself before a Vaucanson loom, which contained the germ of his own, he consecrated himself anew to the perfecting of his invention.

Jacques de Vaucanson, who died when Jacquard was thirty years old, was one of the most celebrated mechanicians of France. His automatons were the wonder of the age. He exhibited a duck which, when moved, ate and drank like a live one. The figure would stretch out its neck for food, and swallow it: walk, swim, dabble in the water, and quack most naturally. His musician, playing the flageolet with the left hand, and beating the tamborine with the right, executing many pieces of difficult music with great accuracy, was an astonishment to everybody. He had been appointed inspector of silk-factories at Lyons, and, because he made some improvements in machines, he was pelted with stones by the workmen, who feared that they would thereby lose their labor. He revenged himself by making a machine which wove, brocaded, and colored at the same time, and was worked by a donkey!

It remained for Jacquard to make the Vaucanson loom of the utmost practical use to Lyons and to the world. After a time he was not only able to dispense with one workman at each loom, but he made machinery do the work of three men and two women at each frame. The city authorities sent a model of this machine to Paris, that the Emperor Napoleon might examine it. So pleased was he that he at once sent for Jacquard to come to Paris. The latter had previously invented a machine

for making fishing-nets, now used in producing Nottingham lace. When brought before Bonaparte, and Carnot the Minister of the Interior, the latter asked, "Is it you then, who pretend to do a thing which is impossible for man,—to make a knot upon a tight thread?"

Jacquard answered the brusque inquiry by setting up a machine, and letting the incredulous minister see for himself.

The Emperor made Jacquard welcome to the *Conservatoire des Arts et Metiers*, where he could study books and machines to his heart's content, and gave him a pension of about twelve hundred dollars for his discovery. When he had, with his own hands, woven a magnificent brocaded silk dress for the Empress Josephine, he returned to Lyons to set up the Jacquard looms. His name began to be lauded everywhere. Claudine's prophecies had at last come true. She had given her life to help him; but she could not live to share his honors.

Soon, however, the tide of praise turned. Whole families found themselves forced into the street for lack of work, as the looms were doing what their hands had done. Bands of unemployed men were shouting, "Behold the traitor! Let him provide for our wives and children now driven as mendicants from door to door; or let him, the destroyer of the peoples' labor, share in the death which he has prepared for us!" The authorities seemed unable to quell the storm, and by their orders the new loom was broken in pieces on the public square. "The iron," says Jacquard, "was sold as old iron; the wood, for fuel." One day he was seized by a crowd of starving workmen, who knocked him down, and dragged him to the banks of the Rhone, where he would have been drowned at once, had not the police rescued him, bleeding and nearly dead. He left the city overwhelmed with

astonishment and sorrow. Soon Switzerland, Germany, Italy, and America were using the Jacquard looms, largely increasing the manufacture and sale of silk, and therefore the number of laborers. The poor men of Lyons awoke to the sad fact, that by breaking up Jacquard's machines, they had put the work of silk-weaving into other hands all over the world; and idleness was proving their ruin. They might have doubled and trebled the number of their factories, and benefited labor a thousand-fold.

The inventor refused to take out a patent for himself, nor would he accept any offers made him by foreigners, because he thought all his services belonged to France. He loved the working people, who, for twenty years, were too blind to see it.

He removed to a little home and garden at Oullins, near Lyons, the use of which had been given him for life, where he could hear the sound of his precious looms on which he had worked for sixty years, and which his city had at last adopted. Here he attended his garden, and went every morning to early church, distributing each day some small pieces of money to poor children. As old age came on, Lyons realized the gratitude due her great inventor. A silver medal was awarded him, and then the grand distinction of the cross of the Legion of Honor.

People from the neighboring towns visited Oullins, and pointed out with pride the noble old man at eighty-four, sitting by his garden-wall, dressed like a workman in his long black tunic, but wearing his broad red ribbon with his cross of honor. Illustrious travellers and statesmen visited him whose fame was now spread through Europe and America.

Toinette, a faithful servant who had known and loved Claudine, watched over the pure-hearted Jacquard till

death came, Aug. 7, 1834. Six years after, Lyons, which once broke his machine and nearly killed him, raised a beautiful statue of him in the public square. The more than seventy thousand looms in the city, employing two hundred thousand workmen, are grandeur monuments even than the statue. The silk-weavers are better housed and fed than formerly. The struggling, self-sacrificing man, who might have been immensely rich as well as famous, was an untold blessing to labor and to the world.

BERTEL THORWALDSEN

ONE of our pleasant memories is a visit to a plain old house in Copenhagen, the boyhood home of the great Danish sculptor, Bertel Thorwaldsen. Here he worked with his father, a poor woodcarver, who, thinking his boy would be a more skilful workman if he learned to draw, sent him to the Free Royal Academy of Fine Arts when he was twelve years old. At the end of four years he took a prize, and the fact was mentioned in the newspapers. The next day, one of the teachers asked, "Thorwaldsen, is it your brother who has carried off the prize?"

Bertel's cheeks colored with pride as he said, "No, sir; it is I." The teacher changed his tone, and replied, "Mr. Thorwaldsen, you will go up immediately to the first rank."

Years afterward, when he had become famous, he said no praise was ever so sweet as being called "Mr." when he was poor and unknown.

Two years later, he won another prize; but he was now obliged to stay at home half the time to help support the large family. Obtaining a small gold medal from the Academy, although so modest that, after the examination, he escaped from the midst of the candidates by a private staircase, he determined to try for the large gold medal. If he could obtain this, he would receive a hundred and twenty dollars a year for three years, and study art in Italy. He at once began to give drawing-lessons, taught modelling to wealthy boys, and helped illustrate books,

working from early morning till late at night. He was rarely seen to smile, so hard was the struggle for daily bread. But he tried for the medal, and won.

What visions of fame must have come before him now, as he said good-bye to his poor parents, whom, alas, he was never to see again, and, taking his little dog Hector, started for far-away Italy! When he arrived, he was so ill and homesick that several times he decided to give up art and go back. He copied diligently the works of the old masters, and tried in vain to earn a little money. He sent some small works of his own to Copenhagen; but nobody bought them. He made "Jason with the Golden Fleece," and, when no one ordered it, the discouraged artist broke it in pieces. The next year he modelled another Jason, a lady furnishing the means; and while everybody praised it, and Canova said, "This young Dane has produced a work in a new and grand style," it did not occur to any one to buy the statue in marble.

The artist could not live on praise alone. Anxious days came and went, and he was destitute and wretched. He must leave Rome, and go back to the wood carving in Copenhagen; for no one wanted beautiful things, unless the maker was famous. He deferred going from week to week, till at last his humble furniture had been sold, and his trunks waited at the door. As he was leaving the house, his travelling companion said to him, "We must wait till to-morrow, from a mistake in our passports."

A few hours later, Mr. Thomas Hope, an English banker, entered his studio, and, struck with the grandeur of his model of Jason, asked the cost in marble. "Six hundred sequims" (over twelve hundred dollars), he answered, not daring to hope for such good fortune. "That is not enough; you should ask eight," said the generous man, who at once ordered it.

And this was the turning-point in Bertel's life. How often a rich man might help a struggling artist, and save a genius to the world, as did this banker! Young Thorwaldsen now made the acquaintance of the Danish ambassador to Naples, who introduced him to the family of Baron Wilhelm von Humboldt, where the most famous people in Rome gathered. Soon a leading countess commissioned him to cut four marble statues,—Bacchus, Ganymede, Apollo, and Venus. Two years later, he was made professor in the Royal Academy of Florence.

The Academy of Copenhagen now sent him five hundred dollars as an expression of their pride in him. How much more he needed it when he was near starving, all those nine years in Rome! The bashful student had become the genial companion and interesting talker. Louis of Bavaria, who made Munich one of the art centres of the world, was his admirer and friend. The Danish king urged him to return to Copenhagen; but, as the Quirinal was to be decorated with great magnificence, Rome could not spare him. For this, he made in three months his famous "Entry of Alexander into Babylon," and soon after his exquisite bas-reliefs, "Night" and "Morning,"—the former, a goddess carrying in her arms two children, Sleep and Death; the latter, a goddess flying through the air, scattering flowers with both hands.

In 1816, when he was forty-six, he finished his Venus, after having made *thirty* models of the figure. He threw away the first attempt, and devoted three years to the completion of the second. Three statues were made, one of which is at Chatsworth, the elegant home of the Duke of Devonshire; and one was lost at sea. A year later, he carved his exquisite Byron, now at Trinity College, Cambridge.

He was now made a member of three other famous

academies. Having been absent from Denmark twenty-three years, the King urged his return for a visit, at least. The Royal Palace of Charlottenburg was prepared for his reception. The students of the Academy escorted him with bands of music, cannon were fired, poems read, cantatas sung; and the King created him councillor of state.

Was the wood-carver's son proud of all these honors? No. The first person he met at the palace was the old man who had served as a model for the boys when Thorwaldsen was at school. So overcome was he as he recalled those days of toil and poverty, that he fell upon the old man's neck, and embraced him heartily.

After some of the grandest work of his life in the Frue Kirke,—Christ and the Twelve Apostles, and others,—he returned to Rome, visiting, on the way, Alexander of Russia, who, after Thorwaldsen had made his bust, presented the artist with a diamond ring.

Although a Protestant, accounted now the greatest living sculptor, he was made president of the Academy of St. Luke, a position held by Canova when he was alive, and was commissioned to build the monument of Pius VII. in St. Peters. Mendelssohn, the great composer, had become his warm friend, and used to play for him as he worked in his studio. Sir Walter Scott came to visit the artist, and as the latter could speak scarcely a word of English, the two shook hands heartily, and clapped each other on the shoulder as they parted.

When Thorwaldsen was sixty-eight years old, he left Rome to end his days among his own people. The enthusiasm on his arrival was unbounded. The whole city waited nearly three days for his coming. Boats decked with flowers went out to meet him, and so many crowded on board his vessel that it was feared she would sink. The members of the Academy came in a body;

and the crowd took the horses from the carriage, and drew it themselves through the streets to the palace of Charlottenburg. In the evening there was a grand torch-light procession, followed by a constant round of parties.

So beset was he with invitations to dinner, that, to save a little time for himself, he told his servant Wilkins, that he would dine with him and his wife. Wilkins, greatly confused, replied, "What would the world think if it found out that the chancellor dined with his servant?"

"The world—the world! Have I not told you a thousand times that I don't care in the least what the world thinks about these things?" Sometimes he refused even to dine with the King. Finding at last that society would give him no rest, he went to live with some friends at Nyso, seven hours by boat from Copenhagen.

Once more he visited Rome, for a year, receiving royal attentions all through Germany. Two years after, as he was sitting in the theatre, he rose to let a lady pass. She saw him bending toward the floor, and asked, "Have you dropped something?"

The great man made no answer; he was dead. The funeral was a grand expression of love and honor. His body lay in state in the Royal Palace, laurel about his brow, the coffin ornamented with floral crowns—one made by the Queen of Denmark; his chisel laid in the midst of laurel and palm, and his great works of art placed about him. Houses were draped in black, bells tolled in all the churches, women threw flowers from their windows before the forty artists who carried the coffin, and the King and Prince Royal received it in person at the Frue Kirke.

Then it was borne to the large museum which Copenhagen had built to receive his work, and buried in the centre of the inner court, which had been prepared under his own hand. A low granite coping surrounds

the grave, which is entirely covered with ivy, and on the side is his boyish name, Bertel (Bartholomew) Thorwaldsen.

PETER COOPER

Just as the great Ship of State, "the Union strong and great," was launched, a little boy was born to delight the hearts of his humble parents, who, notwithstanding that the household was already a large one, made him doubly welcome. For, said his father, "He comes into the world at the beginning of a new era. Thousands of opportunities will be open to him. Something tells me that his name will one day sound throughout the world."

The mother smiled gently. She could not see that the babe differed in any way from any of his four brothers. "If he is as great a man as his soldier father, John Cooper," she said, "or his brave noble grandfather, General John Campbell, who both won honorable spurs in the Revolution, I shall be satisfied."

But the father insisted stoutly that the child's chances for distinction were many times greater, and that it would not be enough for him to do as well as his father and his grandfather. "He ought to go far beyond us," he said, "and he will. I feel that he is destined to be known of all men. Let us, then, give him a name which shall be truly fitting."

What should it be?

They could not decide, and the matter was left until the following evening. Then, as the sturdy hat-maker walked slowly down the little street which has now become Broadway, New York, he turned the great question over and over in his mind: "What shall we name the baby?"

Suddenly a voice seemed to come from the clear starry sky. "Call him Peter," it said.

The good man was deeply astonished. There was nothing remarkable about the name Peter, yet he did not doubt for an instant but that it was the name destined for his child. Neither did his loyal Scotch wife who knew full well that there was such a thing as Divine guidance. No doubt God had spoken. So the babe was christened Peter Cooper.

Years passed; the little one grew and thrived like the hearty youngster that he was, but there was nothing to mark him a wonder child, unless it was that a special Providence seemed to bring him safely through his countless mishaps.

"When only four years old, he climbed about the framework of a new house, and fell, head downward, upon an iron kettle, cutting his forehead to the bone. Later on, he was accidentally cut with a knife in the hands of a playmate. Later still, he cut himself dangerously with an axe. Again, he fell from a high tree, holding an iron hook with which he had been reaching for cherry-bearing branches, and managed to hook out one of his teeth. At another time he went for the nest of a hanging-bird, and had the fact that it was a hornets' nest indelibly impressed on his memory. Of course, he was nearly drowned three times,—such youngsters always have such escapes." ¹ So you see little Peter was all boy, full of adventure and courage which nothing could daunt.

At school, young Peter never got much beyond the three R's. Those were strenuous times, and he was often obliged to lend a hand at home. There were eight children besides Peter in the Cooper family, and the tired, overworked mother often pressed him into service about the house. He would cheerfully cook, wash, make beds,

¹ Raymond's *Peter Cooper*.

sweep; anything to help along. One of his useful inventions was a washing machine. His mother was delighted. Peter might yet prove a wonder child. If he could do one remarkable thing he could do another. And so it proved.

Peter's next triumph was a pair of shoes which he turned out secretly in odd moments. In the eyes of the Coopers there wasn't a greater hero along the Hudson. One pair of shoes meant that shoes could be fashioned for nine Cooper children—an item of great importance in those days when cobblers were few and expensive at best.

The boy learned all about the hat-making business, but he had no desire to become a hatter. His parents had often told him how he was named, and he shared their belief that he would one day become great. He had been born into the world on the wings of a new country. George Washington had just taken his seat as the first President of the United States. Everyone felt that there was a glorious future ahead for the new republic. Surely there was somewhere a niche of usefulness for Peter Cooper. As his father had said, thousands of opportunities were open to him. "He was to see a new-born nation grow in to strength and greatness. Hamlets of his youth were to change into vast cities. Stage-coaches vanish before steam-engines! Sailboats give way to steamboats! A thousand circles of progress were to transpire, and the boy was to be a part of it all."

But this glimpse from one of his biographers carries us beyond our story!

When Peter was still a small child his family had removed to one of the old Dutch villages on the Hudson, and he spent many an hour up in an old apple-tree gazing across the valley to the purple peaks, beyond which lay the great world, and many and grand were the castles which he built concerning the time when he should be a man.

First of all he must be a financier. Not because he

cared about money particularly, but because he was certain he could not do a great amount of good without it. His first attempt, however, ended in disaster. He made a toy wagon which he sold for six dollars. To this he added four dollars, hardly earned by odd jobs, and invested the whole in lottery tickets. He drew *nothing but blanks*, and for many days he mourned the loss of his small fortune with a heavy heart. But he learned the lesson. Never again did he attempt to make money at a game of chance.

At length the time came when Peter was no longer needed at home, and he went to New York, hoping there to prove that there was something in his name of Peter, after all. Shortly, he became apprenticed to John Woodward, a coach builder, at the corner of Broadway and Chambers Street. Here he was to receive \$25 a year and board with his master, who was, of course, to teach him the trade of carriage-making.

It was interesting work, especially the ornamental wood-carving, and young Peter soon proved himself both diligent and capable. He was delighted, also, to feel that Fortune was with him: for he had been especially lucky in the choice of a kind master. Most of the apprentices about him led a sorry life. Many of their masters were hard and unfeeling and treated them little better than brutes.

Not far away was King's College, and Peter often paused in his work to watch the sons of the rich cross College Square. They knew things he did not. The best lectures, the best music, the best libraries, the best colleges, were everywhere ready to welcome and aid them. But there was no place for the greasy mechanic. As a class they had no social standing. There were no night schools, no reading-rooms, no free libraries or lectures open to them.

Some day, the young man resolved, he would break this "galling yoke of bondage," and found a great school which should be free to the poor and friendless. But he formed no definite plans for doing this. He only knew that he must patiently work and strive until he had, in some way, managed to amass money enough to make himself a power.

So he bent all his energies to his task, making several inventions for the betterment of his trade, and was altogether so honest and industrious, that at the end of his four years of servitude, his grateful employer kindly offered to set him up in business. But Cooper dared not accept. The coach-business depended on the whims of the rich, and there was no telling when an elegant and expensive vehicle might be left on his hands. He had a horror of imprisonment for debt, and this law was still in force. So he sought employment in a factory which made machines for shearing cloth. Here, again, he took an active interest in the business, and in three years he had saved enough to patent his own device for shearing. The first purchaser of a county-right for the machine was Mr. Vassar, of Poughkeepsie, afterwards the founder of Vassar College. He paid the young inventor \$500. This was Cooper's first real start in life, and the foundation of the fortune he hoped one day to win. It is a strange coincidence when we remember that it was given to him by the gentleman whose name was to be linked with his in after years as a great benefactor of the young and friendless.

Young Cooper now married and set about planning all sorts of inventions to make the household wheels run smoothly and with ease. His first child slept peacefully in a self-rocking cradle, which had a fan arrangement to drive away the flies, and a music-box to soothe the infant with lullabies. Storm clouds never found a

place beneath the Cooper roof, for the master possessed a serenity—a kindness—seldom found with the inventive faculty. When he had become a white-haired old patriarch his face was stamped with serenity and kindness to an unusual degree. He had the guileless look of innocent happy childhood. One of his biographers says that, "Some who saw old Peter Cooper and studied him at the age of ninety-three must have thought of the far-away little boy he once was."

When the death knell sounded for his shearing machine, Cooper promptly turned his factory into a furniture store and sold it for what he could get. He next tried a grocery store, but the profits were too slow. He felt that he would never get enough money here to realize his purpose. So he bought a glue factory. To be sure he knew nothing about the manufacture of glue. But he knew what a good glue ought to be, and he studied and experimented, until shortly people began to talk of the excellence of Cooper's glue, and he had a ready market for all he could produce. During those first years, Cooper went to his factory at daybreak, kindled the fires and spent the morning making glue. The afternoon was devoted to selling his product. Evenings he kept his accounts, wrote and read.

Gradually hard work, coupled with honest business methods and living always below his means, brought success. Cooper widened his business in several directions. He invested in land and dipped into the iron business, receiving the "Bessemer gold medal," from Great Britain, in 1879, for his services in the development of the American iron trade. His inventions filled a long list and covered a wide field. Some of them were never placed in successful operation, but they could not be called entire failures. They contained the germs of future mechanical progress and spoke eloquently of his

great vigor and genius. Among these may be mentioned the endless chain scheme for transporting canal boats, and the invention of torpedo boats. He was the builder of the *Tom Thumb*, the first American locomotive. He conveyed freight in his iron works at an early day by use of aerial cables. He was the first, to use iron beams as a part of fire-proof construction.

Finally the time came when Peter Cooper's name was indeed known far and wide. His immense rolling mills and glue factory gave employment to thousands of men; his coffers were filled with gold; he had become a Power; he held in his hand the golden key necessary for the realization of his purpose. And he knew just what he wanted to do! He set blithely to work with as much enthusiasm as a boy of sixteen. Instead, he was a boy of sixty-three!

Years before he had bought a lot at the junction of Third and Fourth Avenues, gradually, as he had the money, he had added to his purchase, until now he owned the whole block. And he knew just what sort of school he wished to found upon it. It was to be a union of arts and trades, after the fashion of the school founded in Paris by the first Napoleon. So, in 1854, the corner stone of that noble structure, the Cooper Union, was laid and the building dedicated forever "to the union of art and science, and their application to the useful purposes of life."

The building which stands today practically unchanged, cost better than half a million dollars. There is a library of more than twenty thousand volumes, the best papers and magazines are on its tables, fifteen hundred persons come daily to the comfortable reading rooms. On Saturday nights, the great hall, with a seating capacity for two thousand people, is thrown open for free lectures on a variety of subjects interesting to the

working classes. The very best instructors are employed to teach engineering, drafting, drawing, chemistry, natural philosophy, painting, telegraphy, etc. Day and night the doors of this great institution, which is kept up at a cost of over fifty thousand dollars per year, stand opened wide for all who care to enter. Here hundreds and thousands of poor boys and girls of all classes, creeds, and races have received the benefit of the labors of a little country lad who was himself once a slave of toil and knew the pathos of the cry, "Oh, if I only had an education!"

For nearly thirty years it was Mr. Cooper's delight to drive to the institute daily and witness the earnest students hard at work, making the most of their opportunities. He had a keen eye for the needy, and many a stranded one found food as well as education at the hands of "Grandpa Cooper." Nothing pleased him more than to bring some struggling girl or woman to his school, where they might be made self-supporting. Mothers with families of little ones on their hands found in him a tower of strength. Often he was known to provide a day-nurse for some poor frail washerwoman or charwoman, that she might go to the institution and learn some trade better fitted to her strength.

The name of Peter Cooper soon became a watchword in countless households throughout the length and breadth of the land. People spoke of him as "the best-loved man in America." Whenever he appeared on the streets in his little old-fashioned carriage,¹ cabmen and carters of every description would respectfully touch their caps and give him the right of way.

The story is told that when Edward Cooper was nominated for mayor of New York, people who did not

¹ Today this old carriage, which was once as familiar to New Yorkers as the kindly form it carried has an honored place in the great hall of Cooper Union.

know him said: "He is the son of Peter Cooper, therefore he must be a good man. I will vote for him!"

Peter Cooper's great soul passed from the earth April 4, 1883. Early on the morning of his funeral his body was placed in All Soul's Unitarian Church. Here a mighty multitude thronged in procession to take a last look at his kindly face. Eighteen young men from the Cooper Union formed the guard of honor. Three thousand five hundred students from the Institution passed by in a body, casting flowers upon the casket. Delegations from all the organizations of the city followed, and after them came the vast population who honored his remains simply because of their personal love.

When his body was borne down Broadway a miracle happened. The great noisy avenue was as still and silent as the grave which was soon to hold the loved remains of the people's dearest friend; not a person or a vehicle of any description marred the broad street. It was a beautiful tribute to the quiet, peace-loving, kindly man whose life was in such a full measure what a noble life should be! The streets along the route were draped in black. All the public buildings and the ships in the harbor held their flags at half-mast. The church bells tolled, and all the city mourned, as it had not done since eighty years before, when the body of the Father of Our Country was borne through its streets.

Such a man as Peter Cooper needs no monument to keep his name from being forgotten, for it is immortal. It will go down the centuries with a bright halo of unfading glory. His success must ever stand as an example of what one may accomplish by having a purpose. For this was the ladder upon which the great philanthropist mounted. Upon it he bent all his energies, and he never swerved one jot either to the right or left, but kept on in a straight course, saying always to himself "Higher!

forever higher!" The course which he followed is open to all who wish to enter it. There is nothing to hinder any boy or girl from beginning at the foot of the ladder, as he did, and climbing upward by his own strength of character until they reach the highest round.

Honor and glory forevermore
To this great man gone to rest;
Peace on the dim Plutonian shore;
Rest in the land of the blest.

I reckon him greater than any man
That ever drew sword in war;
Nobler, better, than king or khan,
Better, wiser, by far.

Aye, wisest he in this whole wide land
Of hoarding till bent and gray;
For all you can hold in your cold, dead hand
Is what you have given away.

Joaquin Miller.

MICHAEL FARADAY

IN the heart of busy London, over a stable, lived James and Margaret Faraday, with their four little children. The father was a blacksmith, in feeble health, unable to work for a whole day at a time, a kind, good man to his household; the mother, like himself, was uneducated, but neat and industrious, and devoted to her family. The children learned the rudiments of reading, writing, and arithmetic at school, and then, of course, were obliged to earn their living.

Michael, the third child, born 1791, became, at thirteen years of age, an errand-boy in a bookseller's shop. His first duty was to carry newspapers in the morning to customers, who read them for an hour or two for a trifle, a penny probably, and then gave them to the newsboy to be re-loaned. Often on Sunday morning the patrons would say, "You must call again," forgetting that the next place might be a mile away, and that the young boy was quite as desirous as they, to go to church with his parents. Years after this, when he had become famous the world over, he said, "I always feel a tenderness for those boys, because I once carried newspapers myself."

The following year, 1805, he was apprenticed to a bookseller for seven years, to learn the trade of binding and selling books. Here was hard work before him till he was twenty-one; not a cheerful prospect for one who loved play as well as other boys. Whenever he had a spare moment, he was looking inside the books he was binding. Mrs. Marcet's "Conversations in

Chemistry" delighted him; and when he was given the "Encyclopedia Britannica" to bind, the article on Electricity seemed a treasure-house of wonders. He soon made an electrical machine,—not an expensive one,—simply a glass vial, and other apparatus of a similar kind; and afterwards with a real cylinder. These cost only a few pence a week, but they gave a vast amount of pleasure to the blacksmith's son.

One day he saw in a shop-window a notice that a Mr. Tatum was to give at his own home some lectures on Natural Philosophy. The charge for each was twenty-five cents. No bookseller's apprentice would have such an amount of money to spend weekly as that. However, his brother Robert, three years older, himself a blacksmith, with some pride, perhaps, that Michael was interested in such weighty matters, furnished the money, and a lodger at the home of the bookseller taught him drawing, so that he might be able, in taking notes, to illustrate the experiments. He attended the lectures, wrote them out carefully in a clear hand, bound them in four volumes, and dedicated them to his employer.

A customer at the shop had become interested in a boy who cared so much for science, and took him to hear four lectures given by Sir Humphry Davy at the Royal Institution. This was an unexpected pleasure. He was beginning to sigh for something beyond book-binding. "Oh, if I could only help in some scientific work, no matter how humble!" he thought to himself. He says in his journal, "In my ignorance of the world, and simplicity of my mind, I wrote to Sir Joseph Banks, President of the Royal Society." No answer was ever returned to the request for a situation. Could the president have realized that some day ten thousand people would know the name of Michael Faraday where one knew the name of Sir Joseph Banks, probably he would

have answered the boy's letter. Blessings on the great man or woman who takes time, however briefly, to answer every letter received! Such a man was Garfield, and such was Whittier. A civil question demands a civil answer, whether the person addressed be king or peasant.

About the time his apprenticeship ended, in 1812, he summoned courage to write directly to the great Sir Humphry Davy, sending the full notes he had made at that gentleman's lectures. Sir Humphry, possibly remembering that he, too, had been a poor boy, the son of a widowed milliner, wrote a polite note, saying, that "Science was a harsh mistress, and, in a pecuniary point of view, but poorly rewarding those who devoted themselves to her service"; that he was going out of town, but would see if he could some time aid him.

Meantime Michael was making crude galvanic experiments. He bought some malleable zinc, cut out seven plates, each the size of a half-penny, covered these with the copper half-pennies, placing between them six pieces of paper soaked in a solution of muriate of soda, and with this simple battery, decomposed sulphate of magnesia. So pleased was he that he wrote a letter to one of his boy friends, telling of the experiment, and adding, "Time is all I require. Oh, that I could purchase at a cheap rate some of our modern gents' spare hours, nay, days! I think it would be a good bargain, both for them and for me." The youth had learned the first secret of success,—not to waste time; not to throw it away on useless persons or useless subjects.

He had learned another secret, that of choosing right companions. To this same young friend, Abbott, he wrote, "A companion cannot be a good one, unless he is morally so. I have met a good companion in the lowest path of life, and I have found such as I despised in a rank far superior to mine. . . . I keep regular hours, and enter



MICHAEL FARADAY

not intentionally into pleasures productive of evil." London's highest circles possessed no purer spirit than this young mechanic.

Faraday now began work at his trade of bookbinding for a Frenchman in London, who, having no children, promised him the business, if he would remain with him always; but the employer's temper was so hasty that the position became almost unbearable. The young man was growing depressed in spirits, when one night, just as he was preparing for bed, a loud knock on the door startled him. On looking out of the window, he espied a grand carriage, with a footman in livery, who left a note. This was a request from Sir Humphry Davy to see him in the morning. Was there, then, the possibility of a place in the Royal Institution? Between conflicting hopes and fears, he went to sleep, and in the morning hastened to see the great chemist. The result was an engagement at six dollars a week, with two rooms at the top of the house! He was to clean the instruments, move them to and from the lecture-room, and in all ways to make himself useful. Now he could say good-bye to book-binding; and, though six dollars a week was not a munificent sum, yet he could actually handle beautiful instruments,—not copper half-pence and bits of zinc,—and could listen to stimulating lectures.

And now work began in earnest. He joined the City Philosophical Society, an association of thirty or forty persons in moderate circumstances, who met each Wednesday evening, one of their number giving a lecture. Then a half-dozen friends came together once a week to read, criticise, and correct each other in pronunciation and conversation. How eagerly would such a young man have attended college! There was no opportunity to hear polished talk in elegant drawing-rooms, no chance to improve manners in so-called "best society." He did

what is in the power of everybody,—he educated himself. Did he not need recreation after the hard day's work? Every person has to make his choice. Amusements do not make scholars: pleasure and knowledge do not go hand in hand. Faraday chose the topmost story of the Royal Institution, and books for companions, and immortal fame was the result.

The experiments with Davy soon became absorbing, and often dangerous. Now they extracted sugar from beet-root; now they treated chloride of nitrogen, wearing masks of glass upon their faces, which, notwithstanding were sometimes badly cut by the explosions. Seven months after this, Sir Humphry decided to travel upon the Continent, and asked Faraday to be his amanuensis. This was a rare opportunity for the young assistant. For a year and a half they visited France, Switzerland, Italy, and Germany, climbing Vesuvius, enjoying art-galleries, and meeting the learned and famous of the age. The journey had its disagreeable side; for Faraday was made more or less of a servant by Davy and his sometimes inconsiderate wife; but it had great and lasting advantages for one who had never been but twelve miles from London.

His heart turned longingly back to the poor ones he had left behind. He wrote to his mother, "The first and last thing in my mind is England, home, and friends. When sick, when cold, when tired, the thoughts of those at home are a warm and refreshing balm to my heart. . . . These are the first and greatest sweetness in the life of man. . . . I am almost contented except with my ignorance, which becomes more visible to me every day." And again, "I have several times been more than half decided to return hastily home: I am only restrained by the wish of improvement." To his sister he wrote, "Give my love with a kiss to mother, the first thing

you do on reading this letter, and tell her how much I think of her." To Abbot he wrote something intended for his eyes only, but headed, "I do not wish that my mother should remain ignorant of it. I *have no secrets from her.*" His heart bounded with joy at the prospect of meeting them again, and "enjoying the pleasure of their conversation, from which he had been excluded." No absorption in science could make him outgrow his parents and his humble home.

On his return to England his salary was increased to \$500 yearly, and he was promoted to Laboratory Assistant. He was now twenty-four. He had noted carefully Davy's researches in iodine and chlorine, had seen him develop his safety-lamp, which has proved an untold blessing to miners, had made many experiments from his own thinking; and now he too was to give his first course of six lectures before his friends in the City Philosophical Society, on Chemical Affinity, and kindred topics. He wrote them out with great care; for whatever he did was done well. This year he published his first paper in the *Quarterly Journal of Science* on caustic lime. Encouraged by the approving words of Sir Humphry, the following year he wrote six papers for the "Quarterly," giving his experiments with gases and minerals, and gave another course of lectures before the Philosophical Society. To improve himself in delivering these, he attended lectures on oratory, taking copious notes.

Seven years had now gone by in his apprenticeship to Science. He had published thirty-seven papers in the "Quarterly," had a book ready for the press, on the alloys of steel, and had read a paper before the Royal Society itself, on two new compounds of chlorine and carbon, and a new compound of iodine, carbon, and hydrogen. But the young and now brilliant student had

other weighty matters in hand. Five years before this, he had written in his diary :

“What is’t that comes in false, deceitful guise,
Making dull fools of those that ’fore were wise?
’Tis love.

What’s that the wise man always strives to shun,
Though still it ever o’er the world has run?
’Tis love.”

But now, whether he tried to shun it or no, he became thoroughly in love with Sarah Barnard, an intelligent and sweet-tempered girl, the daughter of a silversmith. Distracted by fears lest he might not win her, he wrote her, “In whatever way I can best minister to your happiness, either by assiduity or by absence, it shall be done. Do not injure me by withdrawing your friendship, or punish me for aiming to be more than a friend by making me less.”

The girl showed this to her father, who replied that love made philosophers say very foolish things. She hesitated about accepting him, and went away to the seaside to consider it; but the ardent lover followed, determined to learn the worst if need be. They walked on the cliffs overhanging the ocean and Faraday wrote in his journal as the day drew near its close, “My thoughts saddened and fell, from the fear I should never enjoy such happiness again. I could not master my feelings, or prevent them from sinking, and I actually at last shamed myself by moist eyes.” He blamed himself because he did not know “the best means to secure the heart he wished to gain.” He knew how to fathom the depths of chemical combinations, but he could not fathom the depths of Sarah Barnard’s heart.

At last the hour of her decision came; and both were made supremely happy by it. A week later he wrote

her, "Every moment offers me fresh proof of the power you have over me. I could not at one time have thought it possible that I, that any man, could have been under the dominion of feelings so undivided and so intense: now I think that no other man can have felt or feel as I do." A year later they were married very quietly, he desiring their wedding day to be "just like any other day." Twenty-eight years later he wrote among the important dates and discoveries of his life, "June 12, 1821, he married,—an event which, more than any other, contributed to his earthly happiness and healthful state of mind. The union was nowise changed, except in the depth and strength of its character."

For forty-seven years "his dear Sarah" made life a joy to him. He rarely left home; but if so, as at the great gathering of British Scientists at Birmingham, he wrote back, "After all, there is no pleasure like the tranquil pleasure of home; and here, even here, the moment I leave the table, I wish I were with you IN QUIET. Oh, what happiness is ours! My runs into the world in this way only serve to make me esteem that happiness the more."

And now came twenty years in science that made Faraday the wonder and ornament of his age. Elected an F. R. S., he began at once twelve lectures in Chemical Manipulation before the London Institution, six on Chemical Philosophy before the Royal Society, published six papers on electro-magnetism, and began a course of juvenile lectures which continued for nineteen years. This was one of the beautiful things of Faraday's life,—a great man living in a whirl of work, yet taking time to make science plain to the young. When asked at what age he would teach science, he replied that he had never found a child too young to understand him. For twenty years he lectured at the Royal Academy at Wool-

wich, became scientific adviser to the government with regard to lighthouses and buoys, not for gain, but for the public good, drew all London to his eloquent lectures with his brilliant experiments, Prince Albert attending with his sons; and published one hundred and fifty-eight scientific essays and thirty series of "Experimental Researches in Electricity," which latter, says Dr. Gladstone, "form one of the most marvellous monuments of intellectual work; one of the rarest treasure-houses of newly-discovered knowledge, with which the world has ever been enriched."

He not only gathered into his vast brain what other men had learned of science, but he tested every step to prove the facts, and became, says Professor Tyndall, "the greatest experimental philosopher the world has ever seen." He loved science as he loved his family and his God, and played with Nature as with a petted child. When he lectured, "there was a gleaming in his eyes which no painter could copy, and which no poet could describe. His audience took fire with him, and every face was flushed."

In his earlier discoveries in compressing gases into liquids, he obtained from one thousand cubic feet of coal gas one gallon of fluid from which he distilled benzine. In 1845 the chemist Hofman found this same substance in coal-tar, from which come our beautiful aniline dyes.

After eighteen years of studying the wonderful results of Galvani's discovery at the University of Bologna, that the legs of a dead frog contract under the electric current; and of Volta, in 1799, with his voltaic pile of copper, zinc, and leather, in salt-water; and of Christian Oersted at the University of Copenhagen; and Ampère and Arago, that electricity will produce magnets, Faraday made the great discovery of magneto-electricity,—that magnets will produce electricity. At once magneto-

electric machines were made for generating electricity for the electric light, electro-plating, etc. This discovery, says Professor Tyndall, "is the greatest experimental result ever attained by an investigator, the Mont Blanc of Faraday's achievements."

Soon after he made another great discovery, that of electric induction, or that one electric current will induce another current in an adjoining wire. Others had suspected this, but had sought in vain to prove it. The Bell telephone, which Sir William Thompson calls "the wonder of wonders," depends upon this principle. Here no battery is required; for the vibration of a thin iron plate is made to generate the currents. After this, Faraday proved that the various kinds of electricity are identical; and that the electricity of the Voltaic pile is produced by chemical action, and not by contact of metals, as Volta had supposed. The world meantime had showered honors upon the great scientist. Great Britain had made him her idol. The Cambridge Philosophical Society, the Institution of Civil Engineers, of British Architects, of Philosophy and of Medicine, and the leading associations of Scotland had made him an honorary member. Paris had elected him corresponding member of all her great societies. St. Petersburg, Copenhagen, Stockholm, Berlin, Palermo, Modena, Lisbon, Heidelberg, Frankfort, and our own Boston and Philadelphia had sent tokens of admiration. Eminent men from all the world came to see him.

How proud his mother must have felt at this wonderful success! She was not able to enter into her son's pursuits from lack of early education; but she talked much about him, calling him ever, "my Michael"; and would do nothing whatever without his advice. He supported her in her declining years; and she seemed perfectly happy. His father had died in his boyhood; but Faraday

ever honored his occupation. He used to say, "I love a smith-shop, and anything relating to smithing. My father was a blacksmith."

He was now forty-nine. The overtaxed brain refused to work longer. Memory was losing her grasp, and but for the sweet and careful presence of Sarah Faraday, the life-work would doubtless have been finished at this time. She took him to Switzerland, where he walked beside the lakes and over the mountains with "my companion, dear wife, and partner in all things." For four years he made scarcely any experiments in original research, and then the tired brain seemed to regain its wonted power, and go on to other discoveries.

An Italian philosopher, Morichini, was the first to announce the magnetizing power of the solar rays. Mrs. Sommerville covered one-half of a sewing-needle with paper, and exposed the other half to the violet rays. In two hours the exposed end had acquired magnetism. Faraday, by long and difficult experiments, showed the converse of this: he magnetized a ray of light,—an experiment "high, beautiful, and alone," says Mr. Tyndall. He also showed the magnetic condition of all matter.

He was always at work. He entered the laboratory in the morning, and often worked till eleven at night, hardly stopping for his meals. He seldom went into society, for time was too precious. If he needed a change, he read aloud Shakespeare, Byron, or Macaulay to his wife in the evening, or corresponded with Herschel, Humbolt, and other great men. In the midst of exhausting labors he often preached on the Sabbath, believing more earnestly in the word of God the more he studied science.

When he was sixty-four the great brain began to show signs of decline. Belgium, Munich, Vienna, Madrid,

Rome, Naples, Turin, Rotterdam, Upsala, Lombardy, and Moscow had sent him medals, or made him a member of their famous societies. Napoleon III. made him a commander of the Legion of Honor, a rare title; and the French exhibition awarded him the grand medal of honor. The Queen asked him to dine with her at Windsor Castle, and, at the request of Prince Albert her husband, she presented him with a lovely home at Hampton Court.

At seventy-one he wrote Mrs. Faraday from Glasgow, "My head is full, and my heart also; but my recollection rapidly fails. You will have to resume your old function of being a pillow to my mind, and a rest,—a happy-making wife." Still he continued to make able reports to the government on lighthouses, electric machines, steam-engines, and the like.

And then for two years the memory grew weaker, the body feebler, and he was, as he told a friend, "just waiting." He died in his chair in his study, August 25th, 1867, and was buried in Highgate Cemetery. Westminster Abbey would have opened her doors to him, but he requested to be buried "in the simplest earthly place, with a gravestone of the most ordinary kind." On a plain marble slab in the midst of clustering ivy are his name and the dates of his birth and death. One feels a strange tenderness of heart as he stands beside this sacred spot where rests one, who, though elected to seventy societies, and offered nearly one hundred titles and tokens of honor, said he "would remain plain Michael Faraday to the last."

Wonderful man! great in mind, noble in heart, and gentle in manner, having brought a strong nature under the most complete discipline. His energy, his devotion to a single object, his untiring work, and his beautiful character carried the blacksmith's son to the highest success.

GEORGE STEPHENSON

ONE chill, foggy night, early in the year of 1813, an awkward, freckle-faced lad of eighteen rapped at the humble door of a cottage in northern England, and asked to see the schoolmaster. Face to face with him, he spoke up modestly: "I would like to join your evening school, sir."

"Humph!" said the master a trifle scornfully, taking more note of the ragged waistcoat, the short breeches, and bare sturdy legs, than he did of the honest, eager face, "What do you wish to study?"

"I want to learn to read and write, sir," the youth replied.

"Very well, you may come," returned the master ungraciously, "but I am bound to say that a great, bare-legged laddie like you would better be at work in the mines than learning his letters."

And he closed the door in the lad's face.

But the young man was not disheartened. He had no wish to spend his life in the mines. His father, Robert Stephenson, was a fireman at one of the Killingworth Colliery pumping engines. Their home was a mere hovel, with a clay floor, mud walls and bare rafters. When he was five years old the boy had begun to make his own living, first by herding cows, then at picking stones from the coal, and later by driving the horse which drew coal from the pit. There were many children in the Stephenson home, times were hard, and always George had been half fed and half clothed. Now, at

eighteen, he was himself a fireman. He knew his engine thoroughly, and could take it apart and make any ordinary repairs. He knew, too, that it was a long way from being a perfect engine. He had his own ideas for improving it, and he wanted to know what the world of engineering and mechanics had to say.

So he cared not one whit for the testy, scornful old master. He plunged into the tasks set before him with a determination and energy which soon won the former's hearty respect and he did all in his power to help him. During the night watches, between bites at lunch, and every spare moment he could find, the lad scrawled letters and figures with a bit of chalk on the sides of the coal wagons. In a short time he could not only read very well, but write a fair hand and solve ordinary problems in arithmetic. Then he turned eagerly to the printed world of mechanics, hoarding his pennies to buy what he thought would help him. He made models of new engines in clay, and soon people began to speak of him as a skillful engineer, one of whom the world was destined to hear.

In 1815, just a little over one hundred years ago, he planned and built his first locomotive. It was a triumph for a youth of twenty, but it did not satisfy its builder. It was not fast enough. He determined to make a better one and went on studying and planning, turning out model after model, each one better than its predecessor, but all of them crude enough, compared with the engines we know today. By and by his employers put young Stephenson's locomotive on their road, but he was not yet satisfied, and went on with his plans and models.

Then, in 1821, came a reward for the young inventor's perseverance and a chance for greater opportunities. He was appointed chief engineer for the now historic Stock-

ton and Darlington railroad, and here he built and put into operation his own engines entirely. But, though these were an improvement on any locomotives yet built, they did not supersede the work of horses. They moved slowly and burned so much coal that they could not compete with the horses in point of economy. For horses were still so used.

Indeed, in those days most people argued that horses were the only practical thing to use. No one but the crazy inventors had any faith in the locomotive ever becoming a motive power. It was customary to use engines only on the stiffest pulls; for the balance horses did the work. Few had yet thought of using the railways for passenger travel; they were built almost entirely for use in the mines, and were only a few miles in length.

All great inventions have small beginnings, and this is very strikingly true of the railroad. Indeed, the inventors of the first "steam-carriage" had no idea of building a railroad track. They undertook to build an engine for use on common roads. Then somebody got a glimmering of turning to account the *tramways*—that is the roads built for *trams*, or wagons—such as were in use for transporting coal from mines.

In this primitive railway wooden rails were fastened lengthwise on half-buried timbers, for the purpose of keeping the cart-wheels on the track. A little later the carts or cars were wheeled along the rails themselves; then, to prevent the wooden rails from wearing out, they were covered with iron; and at last the rails were wholly made of that material.

At first only stationary engines were used on the railroads, the horses being taken off at the heavy points, and the engines by means of ropes and chains doing duty instead. But there seemed no good reason why a locomotive could not be made to run along the track,

provided, the line ran fairly straight, for *of course* no locomotive could be built to take sharp curves! Even our friend George Stephenson, when he had become the foremost authority on locomotives, declared that "steam could not be used as a motive power on a road having curves of less than 900 feet radius." Neither could a locomotive be expected to climb grades; it would be necessary to make a wide detour around the hills!

In 1826, one of the longest railroads which had yet been built was proposed between Liverpool and Manchester. It was designed for both passenger and freight traffic, and George Stephenson, who was now engaged with his son Robert in the manufacture of locomotives at Newcastle-on-Tyne, was asked to become chief engineer. He accepted delightedly, and at once proposed to use locomotives entirely. His employers were dumbfounded, for Stephenson stood almost alone in advocating steam power exclusively. At length, however, the company, catching something of his enthusiasm, agreed at least to consider the matter, and by way of a beginning offered a prize of five hundred pounds for the best locomotive that could be built by a certain day. Stephenson, himself, at once decided to enter the contest. When his friends learned that he proposed to make an engine that would go twelve miles an hour, every one said that this was absurd—that it could not be done. "Twelve miles an hour!" said the critics, "as well trust one's self to be fired off on a rocket."

One man who thought himself very wise said to the inventor, shrewdly: "Suppose you invent an engine of such speed, and suppose while it is running, a cow should stray upon the track. Would that not be a very awkward circumstance?"

"I should think it might—for the cow," answered the engineer dryly.

When the appointed day came four competitors were in the contest, but Stephenson's locomotive carried off the prize at the unprecedented speed of fifteen miles an hour! It was dubbed "The Rocket." And marvellous indeed was its make-up, viewed both in the light of the present and the past! It was a four-wheel engine supported on springs, and with its tender, water and coke weighed something over four tons. No cab sheltered the engineer, no brake checked the speed, and the tall smoke-stack belched smoke and red-hot cinders. But it effectively crashed through ignorance and prejudice, and proved conclusively that steam was the only motive power for railways.

By making a few changes, "The Rocket" gained an added speed of fourteen miles per hour; later, on being put to work in the coal fields it demonstrated that it could go sixty miles an hour, and thus fully established its inventor in the foremost rank of the mechanical engineers of the nineteenth century. The myriad of locomotives of the present day are in their working principles identical with the locomotive built by this great engineer some eighty years ago. The cowcatcher, or pilot, placed in front to remove obstacles from the track, the bell, and the whistle are American developments; so too is the sand box from which sand is sprinkled on the rails to prevent the slipping of the driving wheels.

It is of interest to note here that the first fatal railway accident is laid at the door of "The Rocket." Mr. Huskisson, Home Secretary in the British Cabinet, was knocked down by the locomotive, the wheels passing over his legs. He was placed on board another engine, the *Northumbrian*, driven by George Stephenson himself, who speeded the locomotive fifteen miles in twenty-five minutes, at the rate of thirty-five miles an hour, to Eccles, where the injured man died that night.

As the model railway of its time, the track construction of the Liverpool and Manchester Railway also deserves some mention. It was surveyed and planned entirely by George Stephenson. "Upon the graded surface was placed a layer of broken stone two feet deep. Stone blocks two feet square were set three feet apart, and upon them and upon the wooden cross-ties used on embankments were fastened cast-iron 'chairs' in which the rails were secured by wedges. The rails were of wrought iron fifteen feet long and were rolled with the web deeper at the middle than at the ends." These rails weighed thirty-five pounds per yard, an unheard of measure in those days, but a small affair compared with the huge rails that are used in the railroads of the present.

Not only did Stephenson's work on the Liverpool and Manchester Railway prove the practicability of the locomotive for freight and passenger traffic, but it fired the world to build like commercial thoroughfares. In ten years Great Britain had over one thousand miles of railroad. In our country as yet the locomotive was a rude affair. It could not go faster than fifteen miles an hour. When a hill blocked the way, the road either went around it, or the train was let down or pulled up, as the case might be, by means of a rope and a stationary engine. The old Portage Railroad, built by the State of Pennsylvania, was the most pretentious, but it had no cars, or motive power of any sort, excepting the stationary engines on the hilltops. Anybody might use the line who paid two cents per mile for each passenger, and \$4.92 for each car sent over the rails. Imagine the fierce competition and the resulting confusion! Horses furnished most of the motive power. Here and there along the way were turn-outs where drivers might pass, but these selfsame drivers were a pig-headed lot. They gave small heed to the turn-outs, and when they

met face to face there was a fight and a block, and those in the rear might fret and fume as they pleased! Finally the State built a double track to keep the peace, but then a new source of contention arose: locomotives were now coming into more general use, these of course were faster than horses, and the driver with a horse would seldom take a siding for the locomotive! Stephenson's triumph gave American inventors just the aid and stimulus needed, and ended the brawls; the State bought American-made locomotives and charged for hauling the cars.

Such a crowd as one of these snorting, puffing little locomotives and its odd cars would draw could it pass along a main line today! Even one of the old-style steam-threshing engines, familiar to all country-bred boys and girls, would be a marvel in comparison. These first engines had no cab, no brake, they used wood for fuel, and had a tall smokestack, which must be unjointed and laid down to pass through the covered bridges, while the passengers were showered with belching smoke and cinders, and forced to cover their eyes, mouth, and nostrils!

For a while our first locomotives ran on "strap rails" made of wooden beams or stringers laid on stone blocks and protected on the top surface, where the wheels of the car rested, by long strips or straps of iron spiked on. Often these spikes would work loose, and, as the car passed over, the strap would curl up and come through the bottom of the car, making what was known in the railway parlance as a "snake's head."

With his reputation as an engineer established, Stephenson shortly became chief or consulting engineer to nearly all of the railway projects that were set on foot. He interested himself in motive power for coal mines, and wealth flowed upon him. In 1846, he visited the Con-

minent, where he was received with unusual honors. Wise men sought his friendship, tributes and medals were heaped upon him. He was the first president of the Institution of Mechanical Engineers, which he founded in 1847. His king offered him a knighthood, but he preferred to remain plain George Stephenson. His last years were spent in the pursuits of a quiet country life on his estate, at Tapton House, Chesterfield, where he died, August 12, 1848.

What magical changes have resulted from the genius and the labors of this man! The locomotive has changed the character of human life. It has made the globe smaller for us, and our knowledge of its countries and peoples and products vastly greater. Surely the man who perfected it, George Stephenson, deserves to be called one of the benefactors of mankind.

GEORGE PEABODY

IF America had been asked who were to be her most munificent givers in the nineteenth century, she would scarcely have pointed to two grocers' boys, one in a little country store at Danvers, Mass., the other in Baltimore; both poor, both uneducated; the one leaving seven millions to Johns Hopkins University and Hospital, the other nearly nine millions to elevate humanity. George Peabody was born in Danvers, Feb. 18, 1795. His parents were respectable, hard-working people, whose scanty income afforded little education for their children. George grew up an obedient, faithful son, called a "mother-boy" by his companions, from his devotion to her,—a title of which any boy may well be proud.

At eleven years of age he must go out into the world to earn his living. Doubtless his mother wished to keep her child in school; but there was no money. A place was found with a Mr. Proctor in a grocery-store, and here, for four years, he worked day by day, giving his earnings to his mother, and winning esteem for his promptness and honesty. But the boy at fifteen began to grow ambitious. He longed for a larger store and a broader field. Going with his maternal grandfather to Thetford, Vt., he remained a year, when he came back to work for his brother in a dry-goods store in Newburyport. Perhaps now in this larger town his ambition would be satisfied; but just then the store burned, and George was thrown out of employment.

His father had died, and he was without a dollar in

the world. Ambition seemed of little use now. However, an uncle in Georgetown, D. C., hearing that the boy needed work, sent for him, and thither he went for two years. Here he made many friends, and won trade, by his genial manner and respectful bearing. His tact was unusual. He never wounded the feelings of a buyer of goods, never tried him with unnecessary talk, never seemed impatient, and was punctual to the minute. Perhaps no one trait is more desirable than the latter. A person who breaks his appointments, or keeps others waiting for him, loses friends and business success as well.

A young man's habits are always observed. If he is worthy and has energy, the world has a place for him, and sooner or later he will find it. A wholesale dry-goods dealer, Mr. Riggs, had been watching young Peabody. He desired a partner of energy, perseverance, and honesty. Calling on the young clerk, he asked him to put his labor against his, Mr. Riggs's capital. "But I am only nineteen years of age," was the reply.

This was considered no objection, and the partnership was formed. A year later, the business was moved to Baltimore. The boyish partner travelled on horseback through the western wilds of New York, Pennsylvania, Maryland, and Virginia, selling goods, and lodging over night with farmers or planters. In seven years the business had so increased, that branch houses were established in Philadelphia and New York. Finally Mr. Riggs retired from the firm; and George Peabody found himself, at the age of thirty-five, at the head of a large and wealthy establishment, which his own energy, industry, and honesty had helped largely to build. He had bent his life to one purpose, that of making his business a success. No one person can do many things well.

Having visited London several times in matters of trade, he determined to make that great city his place of residence. He had studied finance by experience as well as close observation, and believed that he could make money in the great metropolis. Having established himself as a banker at Wanford Court, he took simple lodgings, and lived without display. When Americans visited London, they called upon the genial, true-hearted banker, whose integrity they could always depend upon, and transacted their business with him.

In 1851, the World's Fair was opened at the Crystal Palace, London, Prince Albert having worked earnestly to make it a great success. Congress neglected to make the needed appropriations for America; and her people did not care, apparently, whether Powers' Greek Slave, Hoe's wonderful printing-press, or the McCormick Reaper were seen or not. But George Peabody cared for the honor of his nation, and gave fifteen thousand dollars to the American exhibitors, that they might make their display worthy of the great country which they were to represent. The same year, he gave his first Fourth of July dinner to leading Americans and Englishmen, headed by the Duke of Wellington. While he remembered and honored the day which freed us from England, no one did more than he to bind the two nations together by the great kindness of a great heart.

Mr. Peabody was no longer the poor grocery boy, or the dry-goods clerk. He was fine looking, most intelligent from his wide reading, a total abstainer from liquors and tobacco, honored at home and abroad, and very rich. Should he buy an immense estate, and live like a prince? Should he give parties and grand dinners, and have servants in livery? Oh, no! Mr. Peabody had acquired his wealth for a different purpose. He loved humanity. "How could he elevate the people?" was the

one question of his life. He would not wait till his death, and let others spend his money; he would have the satisfaction of spending it himself.

And now began a life of benevolence which is one of the brightest in our history. Unmarried and childless, he made others' wives and children happy by his boundless generosity. If the story be true, that he was once engaged to a beautiful American girl, who gave him up for a former poor lover, the world has been the gainer by her choice.

In 1852, Mr. Peabody gave ten thousand dollars to help fit out the second expedition under Dr. Kane, in his search for Sir John Franklin; and for this gift a portion of the newly-discovered country was justly called Peabody Land. This same year, the town of Danvers, his birthplace, decided to celebrate its centennial. Of course the rich London banker was invited as one of the guests. He was too busy to be present, but sent a letter, to be opened on the day of the celebration. The seal was broken at dinner, and this was the toast, or sentiment, it contained: "*EDUCATION—a debt due from present to future generations.*" A check was enclosed for twenty thousand dollars for the purpose of building an Institute, with a free library and free course of lectures. Afterward this gift was increased to two hundred and fifty thousand dollars. The poor boy had not forgotten the home of his childhood.

Four years later, when Peabody Institute was dedicated, the giver, who had been absent from America twenty years, was present. New York and other cities offered public receptions; but he declined all save Danvers. A great procession was formed, the houses along the streets being decorated, all eager to do honor to their noble townsman. The Governor of Massachusetts, Edward Everett, and others made eloquent addresses,

and then the kind-faced, great-hearted man responded:—

“Though Providence has granted me an unvaried and unusual success in the pursuit of fortune in other lands, I am still in heart the humble boy who left yonder unpretending dwelling many, *very* many years ago. . . . There is not a youth within the sound of my voice whose early opportunities and advantages are not very much greater than were my own; and I have since achieved nothing that is impossible to the most humble boy among you. Bear in mind, that, to be truly great, it is not necessary that you should gain wealth and importance. Steadfast and undeviating *truth*, fearless and straightforward *integrity*, and *honor* ever unsullied by an unworthy word or action, make their possessor greater than worldly success or prosperity. These qualities constitute greatness.”

Soon after this, Mr. Peabody determined to build an Institute, combining a free library and lectures with an Academy of Music and an Art Gallery, in the city of Baltimore. For this purpose he gave over one million dollars—a princely gift indeed! Well might Baltimore be proud of the day when he sought a home in her midst.

But the merchant-prince had not finished his giving. He saw the poor of the great city of London, living in wretched, desolate homes. Vice and poverty were joining hands. He, too, had been poor. He could sympathize with those who knew not how to make ends meet. What would so stimulate these people to good citizenship as comfortable and cheerful abiding-places? March 12, 1862, he called together a few of his trusted friends in London, and placed in their hands, for the erection of neat, tasteful dwellings for the poor, the sum of seven hundred and fifty thousand dollars. Ah, what a friend the poor had found! not the gift of a few dollars, which

would soon be absorbed in rent, but homes which for a small amount might be enjoyed as long as they lived.

At once some of the worst portions of London were purchased; tumble-down structures were removed; and plain, high brick blocks erected, around open squares, where the children could find a playground. Gas and water were supplied, bathing and laundry rooms furnished. Then the poor came eagerly, with their scanty furniture, and hired one or two rooms for twenty-five or fifty cents a week,—cabmen, shoemakers, tailors, and needle-women. Tenants were required to be temperate and of good moral character. Soon tiny pots of flowers were seen in the windows, and a happier look stole into the faces of hard-working fathers and mothers.

Mr. Peabody soon increased his gift to the London poor to three million dollars, saying, "If judiciously managed for two hundred years, its accumulation will amount to a sum sufficient to buy the city of London."

No wonder that these gifts of millions began to astonish the world. London gave him the freedom of the city in a gold box,—an honor rarely bestowed,—and erected his bronze statue near the Royal Exchange. Queen Victoria wished to make him a baron; but he declined all titles. What gift, then, would he accept? was eagerly asked. "A letter from the Queen of England, which I may carry across the Atlantic, and deposit as a memorial of one of her most faithful sons," was the response. It is not strange that so pure and noble a man as George Peabody admired the purity and nobility of character of her who governed England so wisely.

A beautiful letter was returned by the Queen, assuring him how deeply she appreciated his noble act of more than princely munificence,—an act, as the Queen believed, "wholly without parallel," and asking him to accept a

miniature portrait of herself. The portrait, in a massive gold frame, is fourteen inches long and ten inches wide, representing the Queen in robes of state,—the largest miniature ever attempted in England, and for the making of which a furnace was especially built. The cost is believed to have been over fifty thousand dollars in gold. It is now preserved, with her letter, in the Peabody Institute near Danvers.

In 1866, the beautiful, new, white marble Institute in Baltimore was to be dedicated. Mr. Peabody had crossed the ocean to be present. Besides the famous and the learned, twenty thousand children with Peabody badges were gathered to meet him. The great man's heart was touched as he said, "Never have I seen a more beautiful sight than this vast collection of interesting children. The review of the finest army, attended by the most delightful strains of martial music, could never give me half the pleasure." He was now seventy-one years old. He had given nearly five millions; could the world expect any more? He realized that the freed slaves in the South needed an education. They were poor, and so were a large portion of the white race. He would give for their education three million dollars, the same amount he had bestowed upon the poor of London. To the trustees having this gift in charge he said, "With my advancing years, my attachment to my native land has but become more devoted. My hope and faith in its successful and glorious future have grown brighter and stronger. But, to make her prosperity more than superficial, her moral and intellectual development should keep pace with her material growth. I feel most deeply, therefore, that it is the duty and privilege of the more favored and wealthy portions of our nation to assist those who are less fortunate." Noble words!

Mr. Peabody's health was beginning to fail. What he

did must now be done quickly. Yale College received a hundred and fifty thousand dollars for a Museum of Natural History; Harvard the same, for a Museum of Archæology and Ethnology; to found the Peabody Academy of Science at Salem a hundred and forty thousand dollars; to Newburyport Library, where the fire threw him out of employment, and thus probably broadened his path in life, fifteen thousand dollars; twenty-five thousand dollars each to various institutions of learning throughout the country; ten thousand dollars to the Sanitary Commission during the war, besides four million dollars to his relatives; making in all thirteen million dollars. Just before his return to England, he made one of the most tender gifts of his life. The dear mother whom he idolized was dead, but he would build her a fitting monument; not a granite shaft, but a beautiful Memorial Church at Georgetown, Mass., where for centuries, perhaps, others will worship the God she worshipped. On a marble tablet are the words: "Affectionately consecrated by her children, George and Judith, to the memory of Mrs. Judith Peabody." Whittier wrote the hymn for its dedication:—

"The heart, and not the hand, has wrought,
From sunken base to tower above,
The image of a tender thought,
The memory of a deathless love."

Not many months were left to this good man. On November 4, 1869, Mr. Peabody lay dying at the house of a friend in London. The Queen sent a special telegram of inquiry and sympathy, and desired to call upon him in person; but it was too late. "It is a great mystery," said the dying man feebly; "but I shall know all soon." At midnight he passed to his reward.

Westminster Abbey opened her doors for a great

funeral, where statesmen and earls bowed their heads in honor of the departed. Then the Queen sent her noblest man-of-war, *Monarch*, to bear in state, across the Atlantic, "her friend," the once poor boy of Danvers. Around the coffin, in a room draped in black, stood immense wax candles, lighted. When the great ship reached America, Legislatures adjourned, and went with Governors and famous men to receive the precious freight. The body was taken by train to Peabody, and then placed on a funeral car, eleven feet long and ten feet high, covered with black velvet, trimmed with silver lace and stars. Under the casket were winged cherubs in silver. The car was drawn by six horses covered with black and silver, while corps of artillery preceded the long procession. At sunset the Institute was reached, and there, surrounded by the English and American flags draped with crape, the guard kept silent watch about the dead. At the funeral, at the church, Hon. Robert C. Winthrop pronounced the eloquent eulogy, of the "brave, honest, noble-hearted friend of mankind," and then, amid a great concourse of people, George Peabody was buried at Harmony Grove, by the side of the mother whom he so tenderly loved. Doubtless he looked out upon this greensward from his attic window when a child or when he labored in the village store. Well might two nations unite in doing honor to this man, both good and great, who gave nine million dollars to bless humanity.

[The building fund of £500,000 left by Mr. Peabody for the benefit of the poor of London has now been increased by rents and interest to £857,320. The whole of this great sum of money is in active employment, together with £340,000 which the trustees have borrowed. A total of £1,170,787 has been expended during the time the fund has been in existence, of which £80,903 was laid out during 1884. The results of these operations are

seen in blocks of artisans' dwellings built on land purchased by the trustees and let to working men at rents within their means, containing conveniences and comforts not ordinarily attainable by them, thus fulfilling the benevolent intentions of Mr. Peabody. At the present time 4551 separate dwellings have been erected, containing 10,144 rooms, inhabited by 18,453 persons. Thirteen new blocks of buildings are now in course of erection and near completion. Indeed, there is no cessation in the work of fulfilling the intentions of the noble bequest.—*Boston Journal*, Mar. 7, 1885.]

SIR JOSIAH MASON

ONE sunny morning in June, I went out five miles from the great manufacturing city of Birmingham, England, to the pretty town called Erdington, to see the Mason Orphanage. I found an immense brick structure, with high Gothic towers, in the midst of thirteen acres of velvety lawn. Over the portals of the building were the words, "DO DEEDS OF LOVE." Three hundred happy children were scattered over the premises, the girls in brown dresses with long white aprons: some were in the great play-room, some doing the house-work, and some serving at dinner. Sly Cupid creeps into an orphan-asylum even; and the matron had to watch carefully lest the biggest pieces of bread and butter be given by the girls to the boys they liked best.

In the large grounds, full of flowers and trees, among the children he so tenderly loved and called by name, the founder, Sir Josiah Mason, and his wife, are buried, in a beautiful mausoleum, a Gothic chapel, with stone carving and stained-glass windows.

And who was this founder?

In a poor, plain home in Kidderminster, Feb. 23, 1795, Sir Josiah Mason was born. His father was a weaver, and his mother the daughter of a laborer. At eight years of age, with of course little education, the boy began the struggle of earning a living. His mother fitted up two baskets for him, and these he filled with bakers' cakes, and sold them about the streets. Little

Joe became so great a favorite, that the buyers often gave him an extra penny. Finally a donkey was obtained; and a bag containing cakes in one end, and fruit and vegetables in the other, was strapped across his back. In this way, for seven years, Joe peddled from door to door. Did anybody ever think then that he would be rich and famous?

The poor mother helped him with her scanty means, and both parents allowed him to keep all he could make. His father's advice used to be, "Joe, thee'st got a few pence; never let anybody know how much thee'st got in thee pockets." And well the boy carried out his father's injunction in after-life.

When he was fifteen, his brother had become a confirmed invalid, and needed a constant attendant. The father was away at the shop, and the mother busy with her cares; so Joe, who thought of others always before himself, determined to be nurse, and earn some money also. He set about becoming a shoemaker, having learned the trade from watching an old man who lived near their house; but he could make only a bare pittance. Then he taught himself writing, and earned a trifle for composing letters and valentines for his poor neighbors. This money he spent in books, for he was eager for an education. He read no novels nor poetry, but books of history, science, and theology.

Finally the mother started a small grocery and bakery, and Joe assisted. Many of their customers were tramps and beggars, who could buy only an ounce or half-ounce of tea; but even a farthing was welcome to the Masons. Later, Josiah took up carpet-weaving and blacksmithing; but he could never earn more than five dollars a week, and he became restless and eager for a broader field. He had courage, was active and industrious, and had good habits.

He was now twenty-one. He decided to go to Bir-

mingham on Christmas Day, to visit an uncle whom he had never seen. He went, and this was the turning-point of his life. His uncle gave him work in making gilt toys; and, what was perhaps better still for the poor young man, he fell in love with his cousin Annie Griffiths, and married her the following year. This marriage proved a great blessing, and for fifty-two years, childless, they two were all in all to each other. For six years the young husband worked early and late, with the promise of succeeding to the small business; but at the end of these years the promise was broken, and Mason found himself at thirty, out of work, and owning less than one hundred dollars.

Walking down the street one day in no very happy frame of mind, a stranger stepped up to him, and said, "Mr. Mason?"

"Yes," was the answer.

"You are now, I understand, without employment. I know some one who wants just such a man as you, and I will introduce him to you. Will you meet me to-morrow morning at Mr. Harrison's, the split-ring maker?"

"I will."

The next day the stranger said to Mr. Harrison, "I have brought you the very man you want."

The business man eyed Mason closely, saying, "I've had a good many young men come here; but they are afraid of dirtying their fingers."

Mason opened his somewhat calloused hands, and, looking at them, said, "Are *you* ashamed of dirtying yourselves to get your own living?"

Mason was at once employed, and a year later Mr. Harrison offered him the business at twenty-five hundred dollars. Several men, observing the young man's good qualities, had offered to lend him money when he should

go into trade for himself. He bethought him of these friends, and called upon them; but they all began to make excuse. The world's proffers of help or friendship we can usually discount by half. Seeing that not a dollar could be borrowed, Mr. Harrison generously offered to wait for the principal till it could be earned out of the profits. This was a noble act, and Mr. Mason never ceased to be grateful for it.

He soon invented a machine for bevelling hoopings, and made five thousand dollars the first year from its use. Thenceforward his life reads like a fairy-tale. One day, seeing some steel pens on a card, in a shop-window, he went in and purchased one for twelve cents. That evening he made three, and enclosed one in a letter to Perry of London, the maker, paying eighteen cents' postage, which now would be only two cents.

His pen was such an improvement that Mr. Perry at once wrote for all he could make. In a few years, Mason became the greatest pen-maker in the world, employing a thousand persons, and turning out over five million pens per week. Sixty tons of pens, containing one and a half million pens to the ton, were often in his shops. What a change from peddling cakes from door to door in Kidderminster!

Later he became the moneyed partner in the great electro-plating trade of the Elkingtons, whose beautiful work at the Centennial Exposition we all remember.

Mr. Mason never forgot his laborers. When he established copper-smelting works in Wales, he built neat cottages for the workmen, and schools for the three hundred and fifty children. The Welsh refused to allow their children to attend school where they would be taught English. Mr. Mason overcame this by distributing hats, bonnets, and other clothing to the pupils, and, once in school, they needed no urging to remain. The manu-

facturer was as hard a worker as any of his men. For years he was the first person to come to his factory, and the last to leave it. He was quick to decide a matter, and act upon it, and the most rigid economist of time. He allowed nobody to waste his precious hours with idle talk, nor did he waste theirs. He believed, with Shakespeare, that "Talkers are no good doers." His hours were regular. He took much exercise on foot, and lived with great simplicity. He was always cheerful, and had great self-control. Finally he began to ask himself how he could best use his money before he died. He remembered his poor struggling mother in his boyish days. His first gift should be a home for aged women—a noble thought!—his next should be for orphans, as he was a great lover of children. For eight years he watched the beautiful buildings of his Orphanage go up, and then saw the happy children gathered within, bringing many of them from Kidderminster, who were as destitute as himself when a boy. He seemed to know and love each child, for whose benefit he had included even his own lovely home, a million dollars in all. The annual income for the Orphanage is about fifty thousand dollars. What pleasure he must have had as he saw them swinging in the great playgrounds, where he had even thought to make triple columns so that they could the better play hide-and-seek! At eight, he was trudging the streets to earn bread; they should have an easier lot through his generosity.

For this and other noble deeds Queen Victoria made him a knight. What would his poor mother have said to such an honor for her boy, had she been alive!

What would the noble man, now over eighty, do next with his money? He recalled how hard it had been for him to obtain knowledge. The colleges were patronized largely by the rich. He would build a great School of

Science, free to all who depended upon themselves for support. They might study mathematics, languages, chemistry, civil engineering, without distinction of sex or race. For five years he watched the elegant brick and stone structure in Birmingham rise from its foundations. And then, Oct. 1, 1880, in the midst of assembled thousands, and in the presence of such men as Fawcett, Bright, and Max Muller, Mason Science College was formally opened. Professor Huxley, R. W. Dale, and others made eloquent addresses. In the evening, a thousand of the best of England gathered at the college, made beautiful by flowers and crimson drapery. On a dais sat the noble giver, in his eighty-sixth year. The silence was impressive as the grand old man arose, handing the key of his college, his million-dollar gift, to the trustees. Surely truth is stranger than fiction! To what honor and renown had come the humble peddler!

On the following 25th of June, Sir Josiah Mason was borne to his grave, in the Erdington mausoleum. Three hundred and fifty orphan-children followed his coffin, which was carried by eight servants or workingmen, as he had requested. After the children had sung a hymn, they covered the coffin-lid with flowers, which he so dearly loved. He sleeps in the midst of his gifts, one of England's noble benefactors.

WILLIAM LLOYD GARRISON

FOR a great work God raises up a great man. Usually he is trained in the hard school of poverty, to give him courage and perseverance. Usually he stands alone among a great multitude, that he may have firmness and endurance.

William Lloyd Garrison was born to be preëminently the deliverer of the slave. For two hundred years the curse of African slavery had rested upon one of the fairest portions of our land. Everybody thought it an evil to keep four million human beings from even the knowledge of how to read and write, and a cruelty to sell children away from parents, to toil forever without home or kindred. Everybody knew that slavery was as ruinous almost to master as to slave; that labor was thereby despised, and that luxury was sapping the vigor of a race. But every slave meant money, and money is very dear to mankind.

Before the Declaration of Independence, three hundred thousand slaves had been brought to this country. Some of the colonists remonstrated, but the traffic was not stopped till 1808. The Quakers were opposed to human bondage from the first, and decided, in 1780, to free all their slaves. Vermont had freed hers three years previously, and other Northern States soon followed. Benjamin Franklin, Alexander Hamilton, and others were outspoken against the sin; but it continued to increase till, in 1810, we had over a million slaves.

Five years before this time, in a plain, wooden house

in Newburyport, Mass., a boy was born who was to electrify America, and the world even, on this great subject. William Lloyd Garrison's father was a sea-captain, a man who loved books and had some literary ambition; the mother was a noble woman, deeply religious, willing to bear all and brave all for conscience's sake, and fearless in the path of duty. She early taught her boy to hate oppression of every kind, and to stand everywhere for the right. Very poor, there was no chance for William, either in school or college. When he was seven, his mother, having found work for herself as a nurse for the sick, placed the child with a deacon of the town, where he learned to split wood and do other useful things. At nine, the careful mother put him to the shoemaking trade, though he was scarcely large enough to hold the lap-stone. He was not happy here, longing for something that made him think.

Perhaps he would like to build tables and chairs better, so he was apprenticed to a cabinet-maker; but here he was no more satisfied than with the monotony of sewing leather. At his own request, the dealer cancelled the agreement, and the boy found a place to set type on the Newburyport *Herald*. At last he had obtained the work he loved. He would some day own a paper, he thought, and write articles for it. Ah! how often poor boys and rich build air-castles which tumble to the ground. It is well that we build them, for life soon becomes prosaic enough to the happiest of us.

At sixteen he wrote an article for the *Herald* signing it "An Old Bachelor." Imagine his surprise and delight when he saw it really in print! Meantime his mother, who was six hundred miles away, wrote him devoted letters, ever encouraging and stimulating him to be upright and temperate. A year later she died, and William was left to fight his battles alone. He missed the letters,

—missed having some one to whom he could tell a boy's hopes and fears and temptations. That boy is especially blest who has a mother to whom he can confide everything; such a boy usually has a splendid future, because by her wisdom and advice he becomes well fitted for life, making no foolish experiments.

Reading as much as possible, at nineteen William wrote some political articles for a Salem paper, and, strange to say, they were attributed to Hon. Timothy Pickering! Surely, he could do something in the world now; so when his apprenticeship was over and he had worked long and faithfully, he started a paper for himself. He called it the *Free Press*. It was a good title, and a good paper; but, like most first literary adventures, it proved a failure. Perhaps he ought to have foreseen that one can do little without capital; but youth is about as blind as love, and rarely stops to reason.

Did one failure discourage him? Oh, no! He went to Boston, and found a place in a printing office. He soon became the editor of the *National Philanthropist*, the first paper established to advocate total abstinence from intoxicants. His motto was a true one, not very popular, however, in those days, "Moderate drinking is the down-hill road to drunkenness." He was now twenty-two, poor, but God-fearing and self-reliant. About this time there came to Boston a man whose influence changed young Garrison's whole life,—Benjamin Lundy, a Quaker, thirty-nine years of age. Leaving his father's home at nineteen, he had spent four years at Wheeling, Va., where he learned the saddler's trade, and learned also the cruelties of slave-holding. After this he moved to Ohio, and in four years earned three thousand dollars above his living expenses. When he was twenty-six he organized an Anti-slavery Society at his own house, and, promising to become assistant editor of an abolition paper,

he went to St. Louis to dispose of his stock of saddlery. Business was greatly depressed, the whole region being agitated over the admission of Missouri as a slave State; and, after spending two years, Lundy returned to Ohio, on foot, in winter, his property entirely gone.

None of his ardor for freedom having abated, he determined to start a monthly paper, though poor and entirely ignorant about printing. This sheet he called the *Genius of Universal Emancipation*, printed twenty miles from his home, the edition being carried on his back, each month, as he walked the long distance. He moved shortly after to East Tennessee, walking half of the eight hundred miles, and gradually increased his subscription list. Several times his life was in danger; but the slight, gentle Quaker kept quietly on his course. In 1824 he set out on foot for Baltimore, paying his way by saddlery or harness-mending, living on the poorest fare; and he subsequently established the *Genius* there. While he was absent from home, his wife died, leaving twins, and his five children were divided among friends. Deeply sorrowing, he renewed his resolve to devote his life to worse than motherless children,—those sold into bondage,—and made his way as best he could to Boston. Of such material were the foundation stones of the anti-slavery cause.

At his boarding-place Lundy met Garrison, and told him his burning desire to rid the country of slavery. The heart of the young printer was deeply moved. He, too, was poor and unknown, but he had not forgotten his mother's teachings and prayers. After some time he agreed to go to Baltimore, and help edit the *Genius of Universal Emancipation*. Lundy was in favor of sending the slaves to the West Indies or Africa as fast as their masters would consent to free them, which was not very fast. Garrison said, "The slaves are here by no

fault of their own, and do not deserve to be sent back to barbarous Africa." He was in favor of immediate freedom for every human being.

Baltimore had slave-pens on the principal streets. Vessel-loads of slaves, torn from their homes, were sent hundred of miles away to southern ports, and the auction-block often witnessed heart-rending scenes. The tender heart of Garrison was stirred to its very depths. In the first issue of his paper he declared for Immediate Emancipation, and soon denounced the slave-trade between Baltimore and New Orleans as "domestic piracy," giving the names of several citizens engaged in the traffic, among them a vessel-owner from his own town, Newburyport. The Northern man immediately arrested Garrison for "gross and malicious libel," and he was found guilty by a slave-holding court, and fined fifty dollars and costs. No one was ready to give bail, and he was thrown into prison. The young man was not in the least cast down, but, calm and heroic, wrote two sonnets on the walls of his cell.

Meantime, a noble young Quaker at the North, John G. Whittier, was deeply anxious for Garrison. He had no money to pay his fine, but, greatly admiring Henry Clay, whom he hoped to see President, wrote him urging that he aid the "guiltless prisoner." Clay would doubtless have done so, but Arthur Tappan, one of New York's noble men, sent the money, releasing Garrison from his forty-nine days' imprisonment. Wendell Phillips says of him, "He was in jail for his opinions when he was just twenty-four. He had confronted a nation in the very bloom of his youth."

Garrison had not been idle while in prison. He had prepared several lectures on slavery, and these he now gave when he could find a hearing. Large churches were not opened to him, and nobody offered him two

hundred dollars a night! The free colored people welcomed him gladly, but the whites were usually indifferent or opposed to such "fanatical" ideas. At last he came to Boston to start a paper,—that city where brains and not wealth open the doors to the best society. Here, with no money nor influential friends, he started the *Liberator*, with this for his motto, "I will be as harsh as truth and as uncompromising as justice. On this subject I do not wish to speak or write with moderation. I am in earnest. I will not equivocate; I will not excuse; I will not retreat a single inch—and *I will be heard!*"

The North was bound hand and foot by the slave-trade almost as effectually as the South. The great plea was the fear lest the Union would be dissolved. Cotton factories had sprung up on every hand, and it was believed that slave-labor was essential to the producing of cotton. Some thought it would not be safe to free the slaves; that assassinations would be the result. The real secret, however, was that each slave meant several hundred dollars, and freedom meant poverty to the masters. Meantime, the *Liberator* was making itself felt, despite Garrison's poverty. The Vigilance Association of South Carolina offered a reward of \$1,500 for the apprehension and prosecution of any white person who might be detected in distributing or circulating it. In Raleigh, N. C., the grand jury found a bill against the young editor, hoping to bring him to that State for trial. Hon. Robert Y. Hayne, of South Carolina, having received a paper by mail, wrote to Harrison Gray Otis, Mayor of Boston, to ascertain the sender. Mr. Otis caused an agent to visit the office of the *Liberator*, and returned answer to Mr. Hayne, that he found it "an obscure hole, his only visible auxiliary a negro boy; and his supporters a few very insignificant persons of all colors."

And where was this "obscure hole"? In the third story of a business block, "the walls dingy," says Mr. Oliver Johnson in "Garrison and his Times"; "the small windows bespattered with printers' ink; the press standing in one corner; the long editorial and mailing table covered with newspapers; the bed of the editor and publisher on the floor—all these make a picture never to be forgotten." Their food, what little they had, was procured at a neighboring bakery.

Soon Georgia passed a law offering \$5,000 to any person arresting and bringing to trial, under the laws of the State, and punishing to conviction, the editor or publisher of the *Liberator*. What a wonder that some ruffian at midnight did not break into the "obscure hole," and drag the young man off to a slave-vessel lying close by in the harbor! The leaven of anti-slavery was beginning to work. Twelve "fanatics" gathered one stormy night in the basement of an African church in Boston, and organized the New England Anti-Slavery Society in 1832.

The following year, as the managers of the American Colonization Society had sent an agent to England, it was deemed best to send Garrison abroad to tell Wilberforce and others who were working for the suppression of slavery in the West Indies, that it was not a wise plan to send the slaves to Africa. It was difficult to raise the money needed; but self-sacrifice usually leaves a good bank-account. The "fanatic," only twenty-eight, was received with open arms by such men as Lord Brougham, Wilberforce, Clarkson, and Daniel O'Connell. Sir Thomas Fowell Buxton gave a breakfast in his honor. When the guests had arrived, among them Mr. Garrison, Mr. Buxton held up both hands, exclaiming, "Why, my dear sir, I thought you were a black man!" This, Mr. Garrison used to say, was the greatest compliment of

his life, because it showed how truly and heartily he had labored for the slave. A great meeting was arranged for him at Exeter Hall, London. How inspiring all this for the young reformer! Here he met the eloquent George Thompson, and asked him to visit our country, which invitation he accepted.

On his return the American Anti-Slavery Society was formed, Dec. 4, 1833, at Philadelphia, delegates coming from eleven States. John G. Whittier was chosen Secretary. The noble poet has often said that he was more proud that his name should appear signed to the Declaration of Principles adopted at that meeting than on the title-page of any of his volumes. Thus did he ever love liberty.

The contest over the slavery question was growing extremely bitter. Prudence Crandall of Canterbury, Conn., a young Quaker lady, admitted several colored girls to her school, who came from Boston, New York, and Philadelphia. The people were indignant at such a commingling of races. Shopkeepers refused to sell her anything; her well was filled with refuse, and at last her house was nearly torn down by a midnight mob. Lane Theological Seminary, Cincinnati, Western Reserve College, Hudson, O., with some others, were nearly broken up by the conflict of opinion. Some anti-slavery lecturers were tarred and feathered or thrown into prison. In New York, a pro-slavery mob broke in the doors and windows of a Presbyterian church, and laid waste school-houses and dwellings of colored people. In Philadelphia, the riots lasted three days, forty-four houses of colored people being nearly or quite destroyed.

In Boston, a "most respectable" mob, composed, says Horace Greeley, "in good part of merchants," dispersed a company of women belonging to the Female Anti-Slavery Society, while its President was engaged in

prayer. Learning that Garrison was in the adjoining office, they shouted, "We must have Garrison! Out with him! Lynch him!"

Attempting to escape by the advice of the Mayor, who was present, he sought refuge in a carpenter's shop, but the crowd drew him out, and coiling a rope around his body, dragged him bareheaded along the street. One man called out, "He shan't be hurt; he is an American!" and this probably saved his life, though many blows were aimed at his head, and his clothes were nearly torn from his body. The Mayor declaring that he could only be saved by being lodged in jail, Garrison pressed into a hack, and was driven as rapidly as possible to the prison, the maddened crowd clinging to the wheels, dashing against the doors and seizing hold of the horses. At last he was behind the bars and out of their reach. On the walls of his cell he wrote:—

"William Lloyd Garrison was put into this cell on Wednesday afternoon, Oct. 21, 1835, to save him from the violence of a respectable and influential mob, who sought to destroy him for preaching the abominable and dangerous doctrine that 'all men are created equal,' and that all oppression is odious in the sight of God. Confine me as a prisoner, but bind me not as a slave. Punish me as a criminal, but hold me not as a chattel. Torture me as a man, but drive me not like a beast. Doubt my sanity, but acknowledge my immortality."

The "respectable" mob had wrought wiser than they knew. Garrison and his *Liberator* became more widely known than ever. Famous men and women now joined the despised Abolitionists. The conflict was growing deeper. Elijah P. Lovejoy, the ardent young preacher of Alton, Illinois, was murdered by weapons in the hands of a pro-slavery mob, who broke up his printing-press, and threw it into the river. A public meeting was held

in Faneuil Hall to condemn such an outrage. A prominent man in the gallery having risen to declare that Lovejoy "died as the fool dieth," a young man, unknown to most, stepped to the rostrum, and spoke as though inspired. From that day Wendell Phillips was the orator of America. From that day the anti-slavery cause had a new consecration.

From this time till 1860 the struggle between freedom and slavery was continuous. The South needed the Territories for her rapid increase of slaves. The North was opposed; but in the year 1854 the Kansas-Nebraska Act, devised by Stephen A. Douglas, repealed the Missouri Compromise of 1820, which had prohibited slavery north of latitude $36^{\circ} 30'$, the southern boundary of Kansas. Kansas at once became a battle-ground. Armed men came over from Missouri to establish slavery. Men came from New England determined that the soil should be free, if they spilled their blood to gain it. The Fugitive Slave Law, whereby slaves were returned without trial by jury, and slave-owners allowed to search the North for their slaves, made great bitterness. The brutal attack of Preston Brooks, of South Carolina, on Charles Sumner, for his speech on Kansas, and the hanging of John Brown by the State of Virginia for his invasion of Harper's Ferry with seventeen white men and five negroes, calling upon the slaves to rise and demand their liberty, brought matters to a crisis.

Garrison was opposed to war; but after the firing on Sumter, April 12, 1861, it was inevitable. For two years after Abraham Lincoln's election to the Presidency, Garrison waited impatiently for that pen-stroke which set four million human beings free. When the Emancipation Proclamation was issued, Jan. 1, 1863, Garrison's life-work was accomplished. Thirty-five years of untiring, heroic struggle had not been in vain. When two

years later the stars and stripes were raised again over Fort Sumter, he was invited by President Lincoln, as a guest of the government, to witness the imposing scene. When Mr. Garrison arrived in Charleston, the colored people were nearly wild with joy. Children sang and men shouted. A slave made an address of welcome, his two daughters bearing a wreath of flowers to their great benefactor. Garrison's heart was full to overflowing as he replied, "Not unto us, not unto us, but unto God be all the glory for what has been done in regard to your emancipation. . . . Thank God, this day, that you are free. And be resolved that, once free, you will be free forever. Liberty or death, but never slavery! While God gives me reason and strength, I shall demand for you everything I claim for the whitest of the white in this country."

The same year he discontinued the publication of the *Liberator*, putting in type with his own hands the official ratification of the Thirteenth Amendment, forever prohibiting slavery in the United States, and adding, "Hail, redeemed, regenerated America! Hail, all nations, tribes, kindred, and peoples, made of one blood, interested in a common redemption, heirs of the same immortal destiny! Hail, angels in glory; tune your harps anew, singing, 'Great and marvellous are thy works, Lord God Almighty!'"

Two years after the war Mr. Garrison crossed the ocean for the fourth time. He was no longer the poor lad setting type at thirteen, or sleeping on the hard floor of a printing-room, or lying in a Baltimore jail, or the victim of a Boston mob. He was the centre of a grand and famous circle. The Duke and Duchess of Argyle and the Duchess of Sutherland paid him special honors. John Bright presided at a public breakfast given him at St. James' Hall, London. Such men as John Stuart

Mill, Herbert Spencer, and Prof. Huxley, graced the feast. Mr. Bright said in his opening address, concerning Mr. Garrison: "His is the creation of that opinion which has made slavery hateful, and which has made freedom possible in America. His name is venerated in his own country; venerated in this country and in Europe, wheresoever Christianity softens the hearts and lessens the sorrows of men." Edinburgh conferred upon him the freedom of the city, an honor accorded to one other American only,—George Peabody. Birmingham, Manchester, and other cities held great public meetings to do him reverence.

On his return, such friends as Sumner, Wilson, Emerson, Longfellow, Lowell, Greeley, and others presented him with \$30,000. The remainder of his life he devoted to temperance, woman-suffrage, and every other reform calculated to make the world better. His true character was shown when, years before, appointed to the London Anti-Slavery Convention as a delegate, he refused to take his seat after his long journey across the ocean, because such noble co-workers as Lucretia Mott, Mrs. Wendell Phillips, and others, were denied their place as delegates. Thus strenuous was he for right and justice to all. Always modest, hopeful, and cheerful, he was as gentle in his private life with his wife and five children, as he was strong and fearless in his public career. He died at the home of his daughter in New York, May 24, 1879, his children singing about his bed, at his request:

"Awake, my soul, stretch every nerve,"

and,

"Rise, my soul, and stretch thy wings."

At sunset, in Forest Hills, they laid the brave man to

rest, a quartette of colored singers around his open grave,
singing, "I cannot always trace the way."

The storm and peril overpast,
The hounding hatred shamed and still,
Go, soul of freedom! take at last
The place which thou alone canst fill.

Confirm the lesson taught of old—
Life saved for self is lost, while they
Who lose it in His service hold
The lease of God's eternal day.

DAVID GLASGOW FARRAGUT

THE possibilities of American life are strikingly illustrated by the fact that the two names at the head of the army and navy, Grant and Farragut, represent self-made men. The latter was born on a farm near Knoxville, Tennessee, July 5, 1801. His mother, of Scotch descent, was a brave and energetic woman. Once when the father was absent in the Indian wars, the savages came to their plain home and demanded admittance. She barred the door as best she could, and sending her trembling children into the loft, guarded the entrance with an axe. The Indians thought discretion the better part of valor, and stole quietly away.

When David was seven years old, the family having moved to New Orleans, as the father had been appointed sailing master in the navy, the noble mother died of yellow fever, leaving five children, the youngest an infant. This was a most severe blow. Fortunately, soon after, an act of kindness brought its reward. The father of Commodore Porter having died at the Farragut house, the son determined to adopt one of the motherless children, if one was willing to leave his home. Little David was pleased with the uniform, and said promptly that he would go.

Saying good-bye forever to his father, he was taken to Washington, and after a few months spent in school, at the age of nine years and a half, was made a midshipman. And now began a life full of hardship, of adventure, and of brave deeds, which have added lustre to the

American navy, and have made the name of Farragut immortal.

His first cruise was along the coast, in the *Essex*, after the War of 1812 with Great Britain had begun. They had captured the *Alert* and other prizes, and their ship was crowded with prisoners. One night when the boy lay apparently asleep, the coxswain of the *Alert* came to his hammock, pistol in hand. David lay motionless till he passed on, and then crept noiselessly to the cabin, and informed Captain Porter. Springing from his cot, he shouted, "Fire! fire!" The seamen rushed on deck, and the mutineers were in irons before they had recovered from their amazement. Evidently the boy had inherited some of his mother's fearlessness.

His second cruise was in the Pacific Ocean, where they encountered a fearful storm going round Cape Horn. An accident occurred at this time which showed the mettle of the lad. Though only twelve, he was ordered by Captain Porter to take a prize vessel to Valparaiso, the captured captain being required to navigate it. When David requested that the "maintopsail be filled away," the captain replied that he would shoot any man who dared to touch a rope without his orders, and then went below for his pistols. David called one of the crew, told him what had happened, and what he wanted done. "Aye, aye, sir!" responded the faithful sailor, as he began to execute the orders. The young midshipman at once sent word to the captain not to come on deck with his pistols unless he wished to go overboard. From that moment the boy was master of the vessel, and admired for his bravery.

The following year,—1814,—while the *Essex* was off the coast of Chili, she was attacked by the British ships *Phæbe* and *Cherub*. The battle lasted for two hours and a half, the *Phæbe* throwing seven hundred eighteen-



FARRAGUT.

pound shots at the *Essex*.

"I shall never forget," Farragut said years after, "the horrid impression made upon me at the sight of the first man I had ever seen killed. It staggered and sickened me at first; but they soon began to fall so fast that it all appeared like a dream, and produced no effect upon my nerves. . . . Soon after this some gun-primers were wanted, and I was sent after them. In going below, while I was on the ward-room ladder, the captain of the gun directly opposite the hatchway was struck full in the face by an eighteen-pound shot, and fell back on me. We tumbled down the hatch together. I lay for some moments stunned by the blow, but soon recovered consciousness enough to rush up on deck. The captain seeing me covered with blood, asked if I was wounded; to which I replied, 'I believe not, sir.' 'Then,' said he, 'where are the primers?' This brought me completely to my senses, and I ran below again and carried the primers on deck."

When Porter had been forced to surrender, David went below to help the surgeon in dressing wounds. One brave young man, Lieutenant Cowell, said, "O, Davy, I fear it is all up with me!" He could have been saved, had his leg been amputated an hour sooner; but when it was proposed to drop another patient and attend to him, he said, "No, Doctor, none of that; fair play is a jewel. One man's life is as dear as another's; I would not cheat any poor fellow out of his turn."

Many brave men died, saying, "Don't give her up! Hurrah for liberty!" One young Scotchman, whose leg had been shot off, said to his comrades, "I left my own country and adopted the United States to fight for her. I hope I have this day proved myself worthy of the country of my adoption. I am no longer of any use to you or to her; so good-bye!" saying which he threw himself overboard.

When David was taken a prisoner on board the *Phæbe*, he could not refrain from tears of mortification.

"Never mind, my little fellow," said the captain; "it will be your turn next, perhaps."

"I hope so," was the reply.

Soon David's pet pig "Murphy" was brought on board, and he immediately claimed it.

"But," said the English sailor, "You are a prisoner and your pig also."

"We always respect private property," the boy replied, seizing hold of "Murphy"; and after a vigorous fight, the pet was given to its owner.

On returning to Captain Porter's house at Chester, Pa., David was put at school for the summer, under a quaint instructor, one of Napoleon's celebrated Guard, who used no book, but taught the boys about plants and minerals, and how to climb and swim. In the fall he was placed on a receiving-ship, but gladly left the wild set of lads for a cruise in the Mediterranean. Here he had the opportunity of visiting Naples, Pompeii, and other places of interest, but he encountered much that was harsh and trying. Commodore C—— sometimes knocked down his own son, and his son's friend as well,—not a pleasant person to be governed by.

In 1817, Chaplain Folsom of their ship was appointed consul at Tunis. He loved David as a brother, and begged the privilege of keeping him for a time, "because," said he to the commodore, "he is entirely destitute of the aids of fortune and the influence of friends, other than those whom his character may attach to him." For nearly nine months he remained with the chaplain, studying French, Italian, English literature, and mathematics, and developing in manliness and refinement. The Danish consul showed great fondness for the frank, ardent boy, now sixteen, and invited him to his house at

Carthage. Failing in his health, a horseback trip toward the interior of the country was recommended, and during the journey he received a sunstroke, and his eyes were permanently weakened. All his life, however, he had some one read to him, and thus mitigate his misfortune.

The time came to go back to duty on the ship, and Chaplain Folsom clasped the big boy to his bosom, fervently kissing him on each cheek, and giving him his parting blessing mingled with his tears. Forty years after, when the young midshipman had become the famous Admiral, he sent a token of respect and affection to his old friend.

For some years, having been appointed acting lieutenant, he cruised in the Gulf of Mexico, gaining knowledge which he was glad to use later, and in the West Indies, where for two years and a half, he says, "I never owned a bed, but lay down to rest wherever I found the most comfortable berth." Sometimes he and his seamen pursued pirates who infested the coast, cutting their way through thornbushes and cactus plants, with their cutlasses; then burning the houses of these robbers, and taking their plunder out of their caves. It was an exciting but wearing life.

After a visit to his old home at New Orleans,—his father had died, and his sister did not recognize him,—he contracted yellow fever, and lay ill for some time in a Washington hospital. Perhaps the sailor was tired of his roving and somewhat lonely life, and now married, at twenty-two, Miss Susan Marchant of Norfolk, Virginia.

For sixteen years she was an invalid, so that he carried her often in his arms like a child. Now he took her to New Haven for treatment, and improved what time he could spare by attending Professor Silliman's lectures at Yale College. Now he conducted a school on a receiv-

ing-ship, so as to have her with him. "She bore the sickness with unparalleled resignation and patience," says Farragut in his journal, "affording a beautiful example of calmness and fortitude." One of her friends in Norfolk said, "When Captain Farragut dies, he should have a monument reaching to the skies, made by every wife in the city contributing a stone to it." How the world admires a brave man with a tender heart!

Farragut was now nearly forty years of age; never pushing himself forward, honors had come slowly. Three years later, having been made commandant, he married Miss Virginia Royall, also of Norfolk, Va. At the beginning of the Mexican War, he offered his services to the Government, but from indifference, or the jealousy of officials, he was not called upon. The next twelve years were spent, partly in the Norfolk Navy Yard, giving weekly lectures on gunnery, preparing a book on ordnance regulations, and establishing a navy yard on the Pacific Coast. Whatever he did was done thoroughly and faithfully. When asked by the Navy Department to express a preference about a position, he said, "I have no volition in the matter; your duty is to give me orders, mine to obey. . . . I have made it the rule of my life to ask no official favors, but to await orders and then obey them."

And now came the turning-point of his life. April 17, 1860, Virginia, by a vote of eighty-eight to fifty-five, seceded from the United States. The next morning, Farragut, then at Norfolk, expressed disapproval of the acts of the convention, and said President Lincoln would be justified in calling for troops after the Southerners had taken forts and arsenals. He was soon informed "that a person with those sentiments could not live in Norfolk."

"Well then, I can live somewhere else," was the calm reply.

Returning home, he announced to his wife that he had determined to "stick to the flag."

"This act of mine may cause years of separation from your family; so you must decide quickly whether you will go North or remain here."

She decided at once to go with him, and, hastily collecting a few articles, departed that evening for Baltimore. That city was in commotion, the Massachusetts troops having had a conflict with the mob. He finally secured passage for New York on a canal-boat, and with limited means rented a cottage at Hastings-on-the-Hudson, for one hundred and fifty dollars a year. He loved the South, and said, "God forbid that I should have to raise my hand against her"; but he was anxious to take part in the war for the Union, and offered his services to that end.

The Government had an important project in hand. The Mississippi River was largely in the control of the Confederacy, and was the great highway for transporting her supplies. New Orleans was the richest city of the South, receiving for shipment at this time ninety-two million dollars worth of cotton, and more than twenty-five million dollars worth of sugar yearly. If this city could be captured, and the river controlled by the North, the South would be seriously crippled. But the lower Mississippi was guarded by the strongest forts, Jackson and St. Philip, which mounted one hundred and fifteen guns, and were garrisoned by fifteen hundred men. Above the forts were fifteen vessels of the Confederate fleet, including the ironclad ram, *Manassas*, and just below, a heavy iron chain across the river bound together scores of cypress logs thirty feet long, and four

or five feet in diameter, thus forming an immense obstruction. Sharpshooters were stationed all along the banks.

Who could be entrusted with such a formidable undertaking as the capture of this stronghold? Who sufficiently daring, skilful, and loyal? Several naval officers were considered, but Gideon Welles, Secretary of the Navy, said, "Farragut is the man." The steam sloop-of-war, *Hartford*, of nineteen hundred tons burden, and two hundred twenty five feet long, was made ready as his flag-ship. His instructions were, "The certain capture of the city of New Orleans. The Department and the country require of you success. . . . If successful, you open the way to the sea for the Great West, never again to be closed. The rebellion will be riven in the centre, and the flag, to which you have been so faithful, will recover its supremacy in every State."

With a grateful heart that he had been selected for this high place, and believing in his ability to win success, at sixty-one years of age he started on his mission, saying, "If I die in the attempt, it will only be what every officer has to expect. He who dies in doing his duty to his country, and at peace with his God, has played the drama of life to the best advantage." He took with him six sloops-of-war, sixteen gunboats, twenty-one schooners, and five other vessels, forty-eight in all, the fleet carrying over two hundred guns.

April 18, 1862, they had all reached their positions and were ready for the struggle. For six days and nights the mortars kept up a constant fire on Fort Jackson, throwing nearly six thousand shells. Many persons were killed, but the fort did not yield. The Confederates sent down the river five fire-rafts, flat-boats filled with dry wood, smeared with tar and turpentine, hoping that these would make havoc among Farragut's ships; but

his crews towed them away to shore, or let them drift out to sea.

Farragut now made up his mind to pass the forts at all hazards. It was a dangerous and heroic step. If he won, New Orleans must fall; if he failed—but he must not fail. Two gunboats were sent to cut the chain across the river. All night long the commander watched with intense anxiety the return of the boats, which under a galling fire had succeeded in breaking the chain, and thus making a passage for the fleet.

At half past three o'clock on the morning of April 24, the fleet was ready to start. The *Cayuga* led off the first division of eight vessels. Both forts opened fire. In ten minutes she had passed beyond St. Philip only to be surrounded by eleven Confederate gunboats. The *Varuna* came to her relief, but was rammed by two Southern boats, and sunk in fifteen minutes. The *Mississippi* encountered the enemy's ram, *Manassas*, riddled her with shot, and set her on fire, so that she drifted below the forts and blew up.

Then the centre division, led by the *Hartford*, passed into the terrific fire. First she grounded in avoiding a fire-raft; then a Confederate ram pushed a raft against her, setting her on fire; but Farragut gave his orders as calmly as though not in the utmost peril. The flames were extinguished, and she steamed on, doing terrible execution with her shells. Then came the last division, led by the *Sciota*, and Commander Porter's gunboats. In the darkness, lighted only by the flashes of over two hundred guns, the fleet had cut its way to victory, losing one hundred and eighty-four in killed and wounded.

In a twinkling the flames had risen
 Half-way to maintop and mizzen,
 Darting up the skrouds like snakes!
 Ah, how we clanked at the brakes!

DAVID GLASGOW FARRAGUT

And the deep steam-pumps throbbed under,
 Sending a ceaseless glow.
 Our top-men—a dauntless crowd—
 Swarmed in rigging and shroud;
 There ('twas a wonder!)
 The burning ratlins and strands
 They quenched with their bare hard hands.
 But the great guns below
 Never silenced their thunder.

At last, by backing and sounding,
 When we were clear of grounding,
 And under headway once more,
 The whole Rebel fleet came rounding
 The point. If we had it hot before,
 'Twas now, from shore to shore,
 One long, loud thundering roar,—
 Such crashing, splintering, and pounding
 And smashing as you never heard before.

But that we fought foul wrong to wreck,
 And to save the land we loved so well,
 You might have deemed our long gun-deck
 Two hundred feet of hell!
 For all above was battle,
 Broad side, and blaze, and rattle,
 Smoke and thunder alone;
 But down in the sick-bay,
 Where our wounded and dying lay,
 There was scarce a sob or a moan.

And at last, when the dim day broke,
 And the sullen sun awoke,
 Drearly blinking
 O'er the haze and the cannon-smoke,
 That even such morning dulls
 There were thirteen traitor hulls
 On fire and sinking!

—Henry Howard Brownell.

"Thus," says the son of Farragut, in his admirable biography, "was accomplished a feat in naval warfare which had no precedent, and which is still without a parallel except the one furnished by Farragut himself, two years later, at Mobile. Starting with seventeen wooden vessels, he had passed with all but three of them, against the swift current of a river but half a mile wide, between two powerful earthworks which had long been prepared for him, his course impeded by blazing rafts, and immediately thereafter had met the enemy's fleet of fifteen vessels, two of them ironclads, and either captured or destroyed every one of them. And all this with a loss of but one ship from his squadron."

The following day, he wrote:—

"My dearest wife and boy,—I am so agitated that I can scarcely write, and shall only tell you that it has pleased Almighty God to preserve my life through a fire such as the world has scarcely known. He has permitted me to make a name for my dear boy's inheritance, as well as for my comfort and that of my family."

The next day, at eleven o'clock in the morning, by order of Farragut, "the officers and crews of the fleet return thanks to Almighty God for His great goodness and mercy in permitting us to pass through the events of the last two days with so little loss of life and blood."

April 29, a battalion of two hundred and fifty marines and two howitzers, manned by sailors from the *Hartford*, marched through the streets of New Orleans, hoisted the Union flag in place of the Confederate on the city hall, and held possession till General Butler arrived with his troops on May 1. After the fall of the city, the forts surrendered to Porter.

From here Farragut went to Vicksburg with sixteen vessels, "the *Hartford*," he says, "like an old hen taking

care of her chickens," and passed the batteries with fifteen killed and thirty wounded. Three months later he received the thanks of Congress on parchment for the gallant services of himself and his men, and was made Rear-Admiral. He remained on the river and gulf for some months, doing effective work in sustaining the blockade, and destroying the salt-works along the coast. When the memorable passage of the batteries at Port Hudson was made, where one hundred and thirteen were killed or wounded, the *Hartford* taking the lead, his idolized boy, Loyall, stood beside him. When urged by the surgeon to let his son go below to help about the wounded, because it was safer, he replied, "No; that will not do. It is true our only child is on board by chance, and he is not in the service; but, being here, he will act as one of my aids, to assist in conveying my orders during the battle, and we will trust in Providence." Neither would the lad listen to the suggestion; for he "wanted to be stationed on deck and see the fight." Farragut soon sent him back to his mother; for he said, "I am too devoted a father to have my son with me in troubles of this kind. The anxieties of a father should not be added to those of a commander."

Every day was full of exciting incident. The admiral needing some despatches taken down the river, his secretary, Mr. Gabaudan, volunteered to bear the message. A small dug-out was covered with twigs, so as to resemble floating trees. At night he lay down in his little craft, with paddle and pistol by his side, and drifted with the current. Once a Confederate boat pulled out into the stream to investigate the somewhat large tree, but returned to report that, "It was only a log." He succeeded in reaching General Banks, who had taken the place of General Butler, and when the fleet returned to New

Orleans, he was warmly welcomed on board by his admiring companions.

Farragut now returned to New York for a short time, where all were anxious to meet the Hero of New Orleans, and to see the historic *Hartford*, which had been struck two hundred and forty times by shot and shell in nineteen months' service. The Union League Club presented him a beautiful sword, the scabbard of gold and silver, and the hilt set in brilliants.

His next point of attack was Mobile Bay. Under cover of the forts, Morgan, Gaines, and Powell, the blockade was finally broken. A good story is told of the capture of one of these vessels, whose merchant captain was brought before Farragut. He proved to be an old acquaintance, who said he was bound for Matamoras on the Rio Grande! The admiral expressed amazement that he should be three hundred miles out of his course, and said good-naturedly, "I am sorry for you; but we shall have to hold you for your thundering bad navigation!"

And now occurred the most brilliant battle of his career. Aug. 4, 1864, he wrote to his wife,—

"I am going into Mobile Bay in the morning, if God is my leader, as I hope He is, and in Him I place my trust. God bless and preserve you, my darling, and my dear boy, if anything should happen to me.

"Your devoted and affectionate husband, who never for one moment forgot his love, duty, or fidelity to you, his devoted and best of wives."

At half past five on the morning of Aug. 5, fourteen ships and four monitors, headed by the *Brooklyn*, because she had apparatus for picking up torpedoes, moved into action. Very soon the *Tecumseh* the monitor abreast of the *Brooklyn*, went down with nearly every

soul on board, sunk by a torpedo. When the *Brooklyn* saw this disaster, she began to back.

"What's the trouble?" was shouted through the trumpet.

"Torpedoes."

The supreme moment had come for decision. The grand old admiral offered up this prayer in his heart, "O God, direct me what to do. Shall I go on?" And a voice seemed to answer, "Go on!"

"Go ahead!" he shouted to his captain on the *Hartford*; "give her all the steam you've got!" And like a thing of life she swept on over the torpedoes to the head of the fleet, where she became the special target of the enemy. Her timbers crashed, and her "wounded came pouring down,—cries never to be forgotten." Twice the brave admiral was lashed to the rigging by his devoted men, lest in his exposed position he fall overboard if struck by a ball. The fleet lost three hundred and thirty-five men, but Farragut gained the day. When all was over, and he looked upon the dead laid out on the port side of his ship, he wept like a child. The prisoners captured in the defences of Mobile were one thousand four hundred and sixty-four, with one hundred and four guns.

On his return to New York he was welcomed with the grandest demonstrations. Crowds gathered at the Battery, a public reception was given him at the Custom House, and fifty thousand dollars with which to buy a house in New York. Congress made him Vice-Admiral. Prominent politicians asked him to become a candidate for the Presidency; but he refused, saying, "I have no ambition for anything but what I am,—an admiral. I have worked hard for three years, have been in eleven fights, and am willing to fight eleven more if necessary, but when I go home I desire peace and comfort."

At Hastings-on-the-Hudson, the streets were arched with the words "New Orleans," "Mobile," "Jackson," "St. Philip," etc. Boston gave him a welcome reception at Faneuil Hall, Oliver Wendell Holmes reading a poem on the occasion. At Cambridge, two hundred Harvard students took his horses from the carriage, and attaching ropes to it, drew him through the streets. On July 25, 1866, the rank of admiral was created by Congress, and Farragut was appointed to the place. Honors, and well-deserved ones, had come at last to the brave midshipman.

The next year, in command of the European squadron, accompanied by Mrs. Farragut, who went by special permission of the President, he visited France, Russia, and other countries.

Napoleon III. welcomed him to the Tuileries; the Grand Duke Constantine of Russia, Duke of Edinburgh, and Victor Emmanuel each made him their guest; he dined with the King of Denmark and the King of Greece, and Queen Victoria received him at the Osborne House. Two years later he visited the navy yard on the Pacific Coast, which he had established years before.

He died Aug. 14, 1870, at the age of sixty-nine, universally honored and regretted. Congress appropriated twenty thousand dollars for his statue on Farragut Square, Washington, and the work has been executed by Vinnie Ream Hoxie.

Success was not an accident with the Christian admiral. It was the result of devotion to duty, real bravery, and a life distinguished by purity of character and the highest sense of honor.

THOMAS COLE

FOUR of my favorite pictures from childhood have been Cole's "Voyage of Life." I have studied the tiny infant in the boat surrounded by roses, life's stream full of luxuriant vegetation; the happy, ambitious youth, looking eagerly forward to the Temple of Fame, steering the boat himself, with no need of aid from his guardian angel; then the worried and troubled man, his boat tossing and whirling among the broken trees and frightful storms that come to all; and lastly, perhaps most beautiful, the old man sailing peacefully into the ocean of eternity, the angel having returned to guide him, and the way to heaven being filled with celestial spirits. I have always hung these pictures near my writing-table, and their lesson has been a helpful and inspiring one.

No wonder that Thorwaldsen, the great sculptor, said when he looked upon them in Rome, "O great artist! what beauty of conception! what an admirable arrangement of parts! what an accurate study of nature! what truth of detail!" He told Cole that his work was entirely new and original, executed in a masterly manner, and he commended the harmony of color.

These pictures are hung in thousands of homes; but how few persons know the history of the artist! Born in England, Feb. 1, 1801, the only son in a family of eight children, and the youngest but one, we find him when a mere child, in some printworks, learning to engrave simple designs for calico. His father, a woolen

manufacturer, had failed in business, and the family were thrown upon themselves for support. He was a kind and honest man, always hoping to succeed, but never succeeding; always trying new scenes to build up his fortune and never building it. Like other fathers, especially those who have been disappointed in life, he had hopes that his boy would accomplish more than himself.

He wished to apprentice him to an attorney or to an iron manufacturer, but Thomas saw no pleasure in Blackstone, or in handling ponderous iron. A boy of tender feelings, he found little companionship with his fellow-operatives, most of whom were rough; and he enjoyed most an old Scotchman who could repeat ballads, and tell of the beautiful hills and lakes of his native land. When he had leisure, he wandered with his sister Sarah into the surrounding country; and while she sang, he accompanied her with his flute.

With little opportunity for school, he was a great reader; and when through with designs for calico for the day, he buried himself in books, especially about foreign countries, and in imagination clambered over high mountains, and sailed upon broad rivers. He talked much to the family of the wonders of the New World; and when he was eighteen, they all sailed for America. The father rented a little house and shop in Philadelphia, and began to sell the small stock of dry-goods which he had brought with him, while Thomas found work with a person who supplied woodcuts for printers.

The father soon became dissatisfied with his prospects, and moved his family to Steubenville, Ohio, where he hoped to find a land flowing with milk and honey. Thomas remained behind, working on some illustrations for Bunyan's "Holy War," keeping up his spirits with his beloved flute; going to Steubenville the next year, walking almost the entire way from Philadelphia.

Here he worked in his father's small manufactory of paper-hangings; yet he had longings to do some great work in the world, as he wandered alone in the wild and charming scenery. He loved music, architecture, and pictures, but he hardly dared breathe his aspirations save in a few verses of poetry. How in that quiet home a boy should be born who had desires to win renown was a mystery. Nobody knows whence the perilous but blessed gift of ambition comes.

About this time a portrait-painter by the name of Stein came to the village. He took an interest in the poetic boy, and loaned him an English illustrated work on painting. Thomas had already acquired some skill in drawing. Now his heart was on fire as he read about Raphael, Claude Lorraine, and Titian and he resolved to make painting his life-work. How little he knew of the obstacles before a poor artist!

He set to work to make his own brushes, obtaining his colors from a chair-maker. His easel and palette were of his own crude manufacture. The father had serious misgivings for his son; but his mother encouraged him to persevere in whatever his genius seemed to lie. As a rule, women discover genius sooner than men, and good Mary Cole had seen that there was something uncommon in her boy. His brushes ready, putting his scanty wearing apparel and his flute in a green baize bag, hung over his shoulder, the youth of twenty-one started for St. Clairsville, thirty miles distant, to begin life as a painter. He broke through the ice in crossing a stream, and, wet to his breast, arrived at the town, only to find that a German had just been there, and had painted all the portraits which were desired.

However, a sadler was found who was willing to be painted, and after five days of work from morning till night, the young artist received a new saddle as pay. A

military officer gave him an old silver watch for a portrait, and a dapper tradesman a chain and key, which proved to be copper instead of gold. For some other work he received a pair of shoes and a dollar. All these, except the dollar, he was obliged to give to his landlord for board, the man being dissatisfied even with this bargain.

From here Thomas walked one hundred miles to Zanesville, and to his great sorrow, found that the German had preceded him here also, and painted the tavern-keeper and his family. The landlord intimated that a historical picture would be taken in payment for the young stranger's board. Accordingly an impromptu studio was arranged. A few patrons came at long intervals; but it was soon evident that another field must be chosen. What, however, was young Cole's astonishment to find that the historical painting would not be received for board, and that if thirty-five dollars were not at once paid, he would be thrust into jail! Two or three acquaintances became surety for the debt to the unprincipled landlord, and the pale, slender artist hastened toward Chillicothe with but a sixpence in his pocket.

After walking for three days, seventy-five miles, he sat down under a tree by the roadside, wellnigh discouraged, in the hot August day; but when the tears gathered in his eyes, he took out his flute, and playing a lively air, his courage returned. He had two letters of introduction in his pocket, given him at Zanesville, and these he would present, whispering to himself that he must "hold up his head like Michael Angelo" as he offered them. The men who received them had little time or wish to aid the young man. A few persons sat for their portraits, and a few took lessons in drawing; but after a time he had no money to pay for washing his linen, and at last no linen even to be washed. Still en-

thusiastic over art, and with visions of Italy floating in his mind, yet penniless and footsore, he returned to Steubenville to tell his sorrows to his sympathetic mother. How her heart must have been moved as she looked upon her boy's pale face, and great blue eyes, and felt his eager desire for a place of honor in the world, but knew, alas! that she was powerless to aid him.

He took a plain room for a studio, painted some scenes for a society of amateur actors, and commenced two pictures,—Ruth gleaning in the field of Boaz, and the feast of Belshazzar. One Sunday, some vicious boys broke into the studio, mixed the paints, broke the brushes, and cut the paintings in pieces. Learning that the boys were poor, Cole could not bear to prosecute them; and the matter was dropped. He soon departed to Pittsburgh, whither his parents had moved, and began to assist his father in making floor-cloths. Every moment of leisure he was down by the banks of the Monongahela, carefully drawing tree, or cloud, or hill-top.

Finally the old longing became irresistible. He packed his little trunk, his mother threw over his shoulders the table cover, with her blessing and her tears; and with six dollars in his purse, he said good-bye to the family and started for Philadelphia. Then followed, as he used to say in after years, the "winter of his discontent." In a poor quarter of the city, in an upper room, without a bed or fire or furniture, struggled poor Thomas Cole. Timid, friendless, his only food a baker's roll and a pitcher of water, his only bedding at night the table cover, he worked day by day, now copying in the Academy, and now ornamenting bellows, brushes, or Japan ware, with figures of birds or with flowers. Sometimes he ran down a neighboring alley, whipping his hands about him to keep his blood in circulation, lest he be benumbed. He soon became the

victim of inflammatory rheumatism, and was a great sufferer. He still saw before him, someway, somehow, renown. Meantime his pure, noble soul found solace in writing poetry and an occasional story for the "Saturday Evening Post." After a year and a half he put his goods on a wheelbarrow, had them carried to the station, and started for New York, whither his family had moved.

He was now twenty-four. Life had been one continuous struggle. Still he loved each beauty in nature, and hoped for the good time to come. In his father's garret in Greenwich Street, in a room so narrow that he could scarcely work, and so poorly lighted that he was "perpetually fighting a kind of twilight," he labored for two years. Obstacles seemed but to increase his determination to persevere. Of such grand material are heroes made!

His first five pictures were placed for exhibition in the shop of an acquaintance, and were sold at eight dollars apiece. Through the courtesy of a gentleman who purchased three of these, he was enabled to go up the Hudson and sketch from nature among the Catskills. This was indeed a great blessing. On his return, he painted "A View of Fort Putnam," "Lake with dead trees," and "The Falls of the Catskills." These were purchased at twenty-five dollars apiece by three artists, —Trumbull, Dunlap, and Durand.

Trumbull first discovered the merits of the pictures, buying the "Falls" for his studio, and invited Cole to meet Durand at his rooms. At the hour appointed the sensitive artist made his appearance, so timid that at first he could only reply to their cordial questioning by monosyllables. Colonel Trumbull said, "You surprise me, at your age, to paint like this. You have already done what I, with all my years and experience, am yet unable

to do." Through the new friends, attention was called to his work, and he soon had abundant commissions. How his hungry heart must have fed on this appreciation! "From that time," said his friend William Cullen Bryant, "he had a fixed reputation, and was numbered among the men of whom our country had reason to be proud. I well remember what an enthusiasm was awakened by these early works of his,—the delight which was expressed at the opportunity of contemplating pictures which carried the eye over scenes of wild grandeur peculiar to our country, over our arid mountain-tops with their mighty growth of forest never touched by the axe, along the banks of streams never deformed by culture, and into the depth of skies bright with the hues of our own climate; such skies as few but Cole could ever paint, and through the transparent abysses of which it seems that you might send an arrow out of sight."

The struggles were not all over, but the "renown" of which the calico-designer had dreamed had actually come. Down in the heart of Mary Cole there must have been deep thanksgiving that she had urged him on.

He with a few others now founded the National Academy of Design. He took lodgings in the Catskills in the summer of 1826, and worked diligently. He studied nature like a lover; now he sketched a peculiar sunset, now a wild storm, now an exquisite waterfall. "Why do not the younger landscape painters walk—walk alone, and endlessly?" he used to say. "How I have walked, day after day, and all alone, to see if there was not something among the old things which was new!" He knew every chasm, every velvety bank, every dainty flower growing in some tanglewood for miles around. American scenery, with its untamed wilderness, lake, and mountain, was his chief passion. He found no pleasure,

however, in hunting or fishing; for his kind heart could not bear to inflict the slightest injury.

The following spring he exhibited at the National Academy the "Garden of Eden and the Expulsion," rich in poetic conception; and in the fall sketched in the White Mountains, especially near North Conway, which the lamented Starr King loved so well. In the winter he was very happy, finishing his "Chocorua Peak." A visitor said, "Your clouds, sir, appear to move."

"That," replied the artist, "is precisely the effect I desire."

He was now eager to visit Europe to study art; but first he must see Niagara, of which he made several sketches. He had learned the secret, that all poets and artists finally learn,—that they must identify themselves with some great event in history, something grand in nature, or some immortal name. Milton chose a sublime subject, Homer a great war, just as some one will make our civil war a famous epic two centuries hence.

In June, 1829, he sailed for Europe, and there, for two years, studied faithfully. In London, he saw much of Turner, of whom he said, "I consider him as one of the greatest landscape painters that ever lived, and his 'Temple of Jupiter' as fine as anything the world has produced. In landscapes, my favorites are Claude Lorraine, and Gaspar Poussin."

Some of Cole's work was exhibited at the British Gallery, but the autumn coloring was generally condemned as false to nature! How little we know about that which we have not seen!

Paris he enjoyed greatly for its clear skies and sunny weather,—essentials usually to those of poetic temperament, though he was not over pleased with the Venuses and Psyches of modern French art. For nine months he found the "galleries of Florence a paradise to a

painter." He thought our skies more gorgeous than the Italian, though theirs have "a peculiar softness and beauty." At Rome, some of his friends said, "Cole works like a crazy man." He usually rose at five o'clock, worked till noon, taking an hour for eating and rest, and then sketched again till night.

There was a reason for this. The support of the family came upon him, besides the payment of debts incurred by his father.

He felt that every hour was precious. In Rome, he found the Pantheon "simple and grand"; the Apollo Belvidere "the most perfect of human productions," while the Venus de Medici has "the excellence of feminine form, destitute in a great measure of intellectual expression"; the "Transfiguration," "beautiful in color and chiaroscuro," and Michael Angelo's "Moses," "one of the things never to be forgotten."

On his return to New York he took rooms at the corner of Wall Street and Broadway. Here he won the friendship of Luman Reed, for whom he promised to paint pictures for one room, to cost five thousand dollars. The chief pictures for Mr. Reed, who died before their completion, were five, called "The Course of Empire," representing man in the different phases of savage life, high civilization, and ruin through sin, the idea coming to him while in Rome. Of this group, Cooper, the novelist, said, "I consider the 'Course of Empire' the work of the highest genius this country has ever produced, and one of the noblest works of art that has ever been wrought."

In November, 1836, Mr. Cole was married to Maria Bartow, a young lady of refinement and loveliness of character. Soon after, both of his parents died. The "Departure and Return" were now painted, "among his noblest works," says Bryant, followed by the "Voyage

of Life," for Mr. Samuel Ward, who, like Mr. Reed, died before the set was finished. This series was sold in 1876 for three thousand one hundred dollars. These pictures he had worked upon with great care and intensity. He used to say, "Genius has but one wing, and, unless sustained on the other side by the well-regulated wing of assiduity, will quickly fall to the ground. The artist must work always; his eye and mind can work even when his pen is idle. He must, like a magician, draw a circle round him, and exclude all intrusive spirits. And above all, if he would attain that serene atmosphere of mind in which float the highest conceptions of the soul in which the sublimest works have been produced, he must be possessed of a holy and reasonable faith."

The "Voyage of Life" was well received. The engraver, Mr. Smilie, found one morning before the second of the series, "Youth," a person in middle life looking as though in deep thought. "Sir," he said at length, "I am a stranger in the city, and in great trouble of mind. But the sight of these pictures has done me great good. I go away from this place quieted, and much strengthened to do my duty."

In 1841, worn in health, Cole determined to visit Europe again. He wrote from Kenilworth Castle to his wife, "Every flower and mass of ivy, every picturesque effect, waked my regret that you were not by my side. . . . How can I paint without you to praise, or to criticize, and little Theddy to come for papa to go to dinner, and little Mary with her black eyes to come and kiss the figures in the pictures? . . . My life will be burdened with sadness until I return to my wife and family." In Rome he received much attention, as befitted one in his position.

On his return, he painted several European scenes, the "Roman Campagna," "Angels Ministering to Christ

in the Wilderness," "Mountain Ford" (sold in 1876 for nine hundred dollars), "The Good Shepherd," "Hunter's Return," "Mill at Sunset," and many others. For his "Mount Etna," painted in five days, he received five hundred dollars. How different these days from that pitiful winter in Philadelphia!

He dreaded interruptions in his work. His "St. John the Baptist in the Wilderness" was destroyed by an unexpected visit from some ladies and gentlemen, who quenched the fire of heart in which he was working. He sorrowfully turned the canvas to the wall, and never finished it. He had now come to the zenith of his power, yet he modestly said, "I have only learned how to paint." He built a new studio in the Catskills, in the Italian villa style, and hoped to erect a gallery for several paintings he had in contemplation, illustrating the cross and the world, and the immortality of the soul.

But the overworked body at forty-seven years of age could no longer bear the strain. On Saturday, Feb. 5, 1848, he laid his colors under water, and cleansed his palette as he left his studio. The next day he was seized with inflammation of the lungs. The following Friday, after the communion service at his bedside, he said, "I want to be quiet." These were his last words. The tired artist had finished his work. The voyage of life was over. He had won enduring fame.

EZRA CORNELL

IN the winter of 1819 might have been seen travelling from New Jersey to De Ruyter in New York, a distance of two hundred and fifty miles, some covered emigrant wagons, containing a wife and six children in the first, and household goods and farming utensils in the others. Sometimes the occupants slept in a farmhouse, but usually in their vehicles by a camp-fire in the woods.

For two weeks they journeyed, sometimes through an almost uninhabited wilderness and over wellnigh impassable roads. The mother, with a baby in her arms,—her oldest child, Ezra, a boy of twelve,—must have been worn with this toilsome journey; but patient and cheerful no word of repining escaped her lips. Elijah Cornell, a frank, noble-hearted Quaker, was going West to make his living as a potter and farmer combined.

Like other pioneers, they made ready their little home among the sterile hills; and there, for twenty years, they struggled to rear a family that grew to eleven children, instead of six. The boys of the family were taught the simple mysteries of pottery-making early in life, and thus formed habits of industry, while their limited income necessarily made them economical.

The eldest boy, Ezra,—now sixteen,—was growing anxious to be something more than a potter. He was nearly six feet tall, thin, muscular, and full of energy. He was studious, reading every book within his reach, and desirous of an education, which there was no money to procure. Determined, if possible, to go to the common

school one more winter, he and his brother, fifteen years of age, chopped and cleared four acres of heavy beech and maple woodland, plowed, and planted it to corn, and thus made themselves able to finish their education.

Soon after the father engaged a carpenter to build a large pottery. Ezra assisted, and began to think he should like the trade of a carpenter. When the structure was completed, taking his younger brother to the forest, they cut timber, and erected for their father's family a two-story dwelling, the best in the town. Without any supervision, Ezra had made the frame so that every part fitted in its exact place. This, for a boy of seventeen, became the wonder of the neighborhood. Master-builders prophesied a rare carpenter for posterity.

It was evident that the quiet town of De Ruyter could not satisfy such a lad, and at eighteen he started away from his affectionate mother to try the world. She could trust him because he used neither liquor nor tobacco; was truthful, honest, and willing to work hard. If a young man desires to get his living easily, or is very particular as to the kind of work he undertakes, his future success may well be doubted. Ezra found no carpentering, as he had hoped; but in the vicinity of Syracuse, then a small village, he engaged himself for two years, to get out timber for shipment to New York by canal. The following year he worked in a shop making wool-carding machinery, and being now only twenty miles from De Ruyter, he walked home every Saturday evening and back Monday morning. Twenty miles before a day's work would have been too long for most boys. There was no danger that Ezra would grow tender, either of foot or hand, through luxury.

Hearing that there was a good outlook for business at Ithaca, he walked forty miles thither, with a spare suit of clothes, and a few dollars in his pocket. Who

would have said then that this unknown lad, with no capital save courage and ambition, would make the name of Ithaca, joined with that of Cornell, known round the world?

He obtained work as a carpenter, and was soon offered the position of keeping a cotton-mill in repair. This he gladly accepted, using what knowledge he had gained in the machine-shop. A year later, Colonel Beebe, proprietor of a flouring and plaster mill, asked young Cornell to repair his works; and so pleased was he with the mechanic that he kept him for twelve years, making him his confidential agent and general manager. When a tunnel was needed to bring water from Fall Creek, Cornell was made engineer-in-chief of the enterprise; when labor-saving machinery was required, the head of the enterprising young man invented it.

Meantime he had married, at the age of twenty-four, an intelligent girl, Mary Ann Wood, four years his junior, the second in a family of eleven children. As the young lady was not a Quaker, Cornell was formally excommunicated from his church for taking a person outside the fold. He was offered forgiveness and reinstatement if he would apologize and show proper regret, which he refused to do, feeling that the church had no right to decide upon the religious convictions of the person he loved.

He soon purchased a few acres of land near the mill, and erected a simple home for his bride. Here they lived for twenty years, and here their nine children were born, four of whom died early. It was happiness to go daily to his work, receive his comfortable salary, and see his children grow up around him with their needed wants supplied. But the comfortable salary came to an end. Colonel Beebe withdrew from active business, the mill was turned into a woolen factory, and Cornell was

thrown out of work. Business depression was great all over the country. In vain for months he sought for employment. The helpless family must he supported; at the age of thirty-six matters began to look serious.

Finally, he went to Maine in the endeavor to sell the patent right of a new plow, recently invented. He visited the *Maine Farmer*, and met the editor, Hon. F. O. J. Smith, a member of Congress, who became much interested. He tried also to sell the patent in the State of Georgia, walking usually forty miles a day, but with little success. Again he started for Maine, walking from Ithaca to Albany, one hundred and sixty miles in four days, then, going by rail to Boston, and once more on foot to Portland. He was fond of walking, and used to say, "Nature can in no way be so rationally enjoyed, as through the opportunities afforded the pedestrian."

Entering the office of the *Maine Farmer* again, he found "Mr. Smith on his knees in the middle of his office floor, with a piece of chalk in his hand, the mould-board of a plow lying by his side, and with various chalk-marks on the floor before him."

Mr. Smith arose and grasped him cordially by the hand, saying, "Cornell, you are the very man I want to see. I have been trying to explain to neighbor Robertson a machine that I want made, but I cannot make him understand it. I want a kind of scraper, or machine for digging a ditch for laying our telegraph pipe underground. Congress has appropriated thirty thousand dollars to enable Professor Morse to test the practicability of his telegraph on a line between Washington and Baltimore. I have taken the contract to lay the pipe at one hundred dollars a mile."

Mr. Cornell's ready brain soon saw what kind of a machine was needed, and he sketched a rough diagram of it.

Without much hope of success, Smith said, "You make a machine, and I will pay the expense whether successful or not; if successful, I will pay you fifty dollars, or one hundred, or any price you may name."

Mr. Cornell at once went to a machine shop, made the patterns for the necessary castings, and then the wood-work for the frame. The trial of the new machine was made at Mr. Smith's homestead, four yoke of oxen being attached to the strange-looking plow, which cut a furrow two and one-half feet deep, and one and one-fourth inches wide, and laid the pipe in the bottom at the same time. It worked successfully, and Mr. Cornell was asked to take charge of the laying of the pipe between Baltimore and Washington. He accepted, for he believed the telegraph would become a vast instrument in civilization. The loss of a position at the Beebe mill proved the opening to a broader world; his energy had found a field as wide as the universe.

It was decided to put the first pipe between the double tracks of the Baltimore and Ohio railroad. With an eight-mule team, horses being afraid of the engines, nearly a mile of pipe was laid each day. Soon Professor Morse came hurriedly, and calling Mr. Cornell aside, said, "Can you not contrive to stop this work for a few days in some manner, so the papers will not know that it has been purposely interrupted? I want to make some experiments before any more pipe is laid."

Cornell had been expecting this, for he knew that the pipes were defective, though other officials would not permit Morse to be told of it. Replying that he would do as requested, he stepped back to his plow, and said, "Hurrah, boys, whip up your mules; we must lay another length of pipe before we quit to-night." Then he purposely let the machine catch against a point of rock, making it a perfect wreck.

Mr. Cornell began now, at Professor Morse's request, to experiment in the basement of the Patent Office at Washington, studying what books he could obtain on electrical science. It was soon found to be wise to put the wires upon poles, as Cooke and Wheatstone had done in England. The line between Baltimore and Washington proved successful despite its crudities; but what should be done with it? The Government did not wish to buy it, and private capital was afraid to touch it.

How could the world be made interested? Mr. Cornell, who had now put his heart into the telegraph, built a line from Milk Street, Boston, to School Street, that the people might see for themselves this new agent which was to enable nations to talk with each other; but nobody cared to waste a moment in looking at it. They were more interested in selling a piece of cloth, or discovering the merits of a dead philosopher. Not delighted with the indifference of Boston, he moved his apparatus to New York in 1844, and constructed a line from opposite Trinity Church on Broadway, to near the site of the present Metropolitan Hotel; but New York was even more indifferent than Boston.

The *Tribune*, *Express*, and some other newspapers gave cordial notices of the new enterprise, but the *Herald* said plainly that it was opposed to the telegraph, because now it could beat its rivals by special couriers; but if the telegraph came into use, then all would have an equal opportunity to obtain news! During the whole winter Mr. Cornell labored seemingly to no purpose, to introduce what Morse had so grandly discovered. A man of less will and less self-reliance would have become discouraged. He met the fate of all reformers or inventors. Nobody wants a thing till it is a great success, and then everybody wants at the same moment.

Finally, by the hardest struggle, the Magnetic

Telegraph Company was formed for erecting a line between New York, Philadelphia, Baltimore, and Washington, and Mr. Cornell for superintending it was to receive one thousand dollars per annum. So earnest was he for the matter that he subscribed five hundred dollars to the stock of the company, paying for it out of his meagre salary! Such men,—willing to live on the merest pittance that a measure of great practical good may succeed,—such men deserve to win.

The next line was between New York and Albany, and Mr. Cornell, being the contractor, received his first return for these years of labor six thousand dollars in profits. The tide had turned; and though afterwards various obstacles had to be met and overcome, the poor mechanic had started on the highroad to fame and fortune. He next organized the Erie and Michigan Telegraph Company, supposing that the Western cities thus benefited would subscribe to the stock; but even in Chicago, which now pays three thousand dollars daily for telegraphic service, it was impossible to raise a dollar.

A year later, the New York and Erie telegraph line was constructed through the southern part of New York State. Mr. Cornell, believing most heartily in the project obligated himself heavily, and the result proved his far-sightedness. But now ruinous competition set in. Those who had been unwilling to help at first were anxious to share profits. To save all from bankruptcy in the cutting of rates, Mr. Cornell and a few others consolidated the various interests in the Western Union Telegraph Company.

For more than fifteen years he was the largest stockholder in the company; it was not strange therefore, that middle life found Ezra Cornell a millionaire. This was better than making pottery in the little town of De Ruyter. It had taken work, however, to make this for-

tune. While others sauntered and enjoyed life at leisure, he was working early and late, away from his family most of the time for twelve years.

In 1857, when fifty years of age, he purchased three hundred acres near Ithaca, planted orchards, bought fine cattle and horses, and moved his family thither. He was made president of the County Agricultural Society, and in 1862 was chosen to represent the State Agricultural Society at the International Exposition in London. Taking his wife with him, they travelled in Great Britain and on the Continent, enjoying a few months of recreation, for the first time since, when a youth, thirty years before, he had walked into Ithaca.

During the war he gave money and sympathy freely, being often at the front, in hospitals, and on battlefields, caring for the wounded and their families, and aiding those whom the war had left maimed or impoverished. For six years he served acceptably in the State Legislature. Self-reliant, calm, unselfish, simple in dress and manner, he was, alike the companion of distinguished scholars, and the advocate of the people.

The great question now before his mind was how to spend his fortune most wisely. He recalled the days when he cleared four acres of timber land, that he might have three months of schooling. He had regretted all his life his lack of a college education. He determined therefore to build "an institution where *any* person can find instruction in *any* study." Preparatory to this he built Cornell Library, costing sixty-one thousand dollars. A workman, losing one of his horses by accident in the construction of the edifice, was called upon by the philanthropist, who, after inquiring the value of the animal, drew a check and handed it to the man, remarking, with a kind smile, "I presume I can better than you afford to lose the horse." A man with money enough

to build libraries does not always remember a laborer!

Mr. Cornell's first gift toward his university was two hundred acres of his cherished farm, and five hundred thousand dollars in money. The institution was formally opened in 1868, Hon. Andrew D. White, a distinguished graduate of Yale and of the University of Berlin, being chosen president. Soon over four hundred students gathered from over twenty-seven States. Mr. Cornell's gifts afterward, including his saving the Land Grant Fund from depreciation, amounted to over three million dollars. A wonderful present from a self-made mechanic! Other men have followed his illustrious example. Cornell University is now one of the most liberally endowed institutions in the country.

Mr. Cornell did everything to enrich and develop his own town. He brought manufactories of glass and iron into her midst, held the presidency of the First National Bank for a dozen years, made her as far as possible a railroad centre, and gave generously to her churches of whatever denomination. The first question asked in any project was, "Have you seen Ezra Cornell? He will take hold of the work; and if he is for you, no one will be against you, and success is assured, if success be possible."

On Dec. 9, 1874, at the age of sixty-seven, scarcely able to stand, he arose from his bed and was dressed that he might attend to some unfinished business. Shortly after noon, it was finished by an unseen hand. His body was carried to Library Hall, and there, the Cornell Cadets standing as guard of honor, thousands looked upon the renowned giver.

Froude, the English historian, well said of him, "There is something I admire even more than the university, and that is the quiet, unpretending man by whom the university was founded. We have had such men in old times,

and there are men in England who make great fortunes and who make claim to great munificence, but who manifest their greatness in buying great estates and building castles for the founding of peerages to be handed down from father to son. Mr. Cornell has sought for immortality, and the perpetuity of his name among the people of a free nation. There stands his great university, built upon a rock, built of stone, as solid as a rock, to endure while the American nation endures. When the herald's parchment shall have crumbled into dust, and the antiquarians are searching among the tombstones for the records of these departed families, Mr. Cornell's name will be still fresh and green through generation after generation."

Overlooking Ithaca and Cayuga Lake stands his home, a beautiful Gothic villa in stone, finished a year after his death. His motto, the motto of his life, is carved over the principal entrance, "TRUE AND FIRM."

GIUSEPPE GARIBALDI

FEW men come to greatness. Most drift on with the current, having no special plan nor aim. They live where their fathers lived, taking no thought beyond their neighborhood or city, and die in their little round of social life.

Not so a boy born in Southern France, in 1807. Giuseppe Garibaldi was the son of humble parents. His father was a sailor, with a numerous family to support, seemingly unskilled in keeping what little property he had once acquired. His mother was a woman of ambition, energy, and nobility of character. If one looks for the cause of greatness in a man, he seldom has to go further than the mother. Hence the need of a highly educated, noble womanhood all over the world. Such as Giuseppe Garibaldi are not born of frivolous, fashionable women.

Of his mother, the great soldier wrote in later years, "She was a model for mothers. Her tender affection for me has, perhaps, been excessive; but do I not owe to her love, to her angel-like character, the little good that belongs to mine? Often, amidst the most arduous scenes of my tumultuous life, when I have passed unharmed through the breakers of the ocean or the hailstorms of battle, she has seemed present with me. I have, in fancy, seen her on her knees before the Most High—my dear mother!—imploring for the life of her son; and I have believed in the efficacy of her prayers." No wonder that, "Give me the mothers of the nation to

educate, and you may do what you like with the boys," was one of his favorite maxims.

Giuseppe was an ardent boy, fond of books, loving to climb the lonely mountains around his home, and eager for some part of the world's bustle. Sometimes he earned his living among the fishermen on the Riviera; sometimes he took sea-voyages with his father. He had unusual tenderness of heart, combined with fearlessness. One day he caught a grasshopper, took it to his house, and, in handling it, broke its leg. He was so grieved for the poor little creature, that he went to his room and wept bitterly for hours. Another time, standing by a deep ditch, he discovered that a woman had fallen from the bank as she was washing clothes. With no thought for his own life, he sprang in and rescued her.

His parents, seeing that he was quick in mathematics and the languages, desired him to study for the ministry; but he loved the sea and adventure too well for a sedentary life. Becoming tired of study, at twelve years of age, he and some companions procured a boat, put some provisions and fishing-tackle on board, and started to make their fortune in the East. These visions of greatness soon came to an inglorious end; for the paternal Garibaldi put to sea at once, and soon overtook and brought home the mortified and disappointed infantile crew.

At twenty-one, we find Garibaldi second in command on the brig "Cortese," bound for the Black Sea. Three times during the voyage they were plundered by Greek pirates, their sails, charts, and every article of clothing taken from them, the sailors being obliged to cover their bodies with some matting, left by chance in the hold of the ship. As a result of this destitution, the young commander became ill at Constantinople, and was cared for by some Italian exiles. Poor, as are most who are born

to be leaders, he must work now to pay the expenses incurred by this illness. Through the kindness of his physician, he found a place to teach, and when once more even with the world pecuniarily, went back to sea, and was made captain.

He was now twenty-seven years old. Since his father had taken him when a mere boy to Rome, he had longed for and prayed over his distracted Italy. He saw what the Eternal City must have been in her ancient splendor; he pictured her in the future, again the pride and glory of a united nation. He remembered how Italy had been the battle-ground of France, Spain, and Austria, when kings, as they have ever done, quarrelled for power. He saw the conqueror of Europe himself conquered by the dreadful Russian campaign: then the Congress of Vienna parcelling out a prostrate people among the nations. Austria took Lombardy and Venice; Parma and Lucca were given to Marie Louise, the second wife of Napoleon; and the Two Sicilies to Ferdinand II., who ruled them with a rod of iron. Citizens for small offences were lashed to death in the public square. Filthy dungeons, excavated under the sea, without light or air, were filled with patriots, whose only crime was a desire for a free country. The people revolted in Naples and Sardinia, and asked for a constitution; but Austria soon helped to restore despotism. Kings had divine rights; the people had none. No man lessens his power willingly. The only national safety is the least possible power in the hands of any one person. The rule of the many is liberty; of the few, despotism.

Garibaldi was writing all these things on his heart. His blood boiled at the slavery of his race. Mazzini, a young lawyer of Genoa, had just started a society called "Young Italy," and was looking hopefully, in a hopeless age, toward a republic for his native country. Garibaldi

was ready to help in any manner possible. The plan proposed was to seize the village of St. Julien, and begin the revolt; but, as usual, there was a traitor in the camp: they were detected; and Garibaldi, like the rest, was sentenced to death. This was an unexpected turn of events for the young sea-captain. Donning the garb of a peasant, he escaped by mountain routes to Nice, his only food being chestnuts, bade a hasty farewell to his precious mother, and started for South America. He had learned, alas, so soon, the result of working for freedom in Italy!

He arrived at Rio Janeiro, an exile and poor; but, finding several of his banished countrymen, they assisted him in buying a trading-vessel; and he engaged in commerce. But his mind constantly dwelt on freedom. The Republic of Rio Grande had just organized and set up its authority against Brazil. Here was a chance to fight for liberty. A small cruiser was obtained, which he called *The Mazzini*, and, with twenty companions, he set out to combat an empire. After capturing a boat loaded with copper, the second vessel they met gave battle, wounded Garibaldi in the neck, and made them all prisoners.

A little later, attempting to escape, he was brutally beaten with a club, and then his wrists tied together by a rope, which was flung over a beam. He was suspended in the air for two hours. His sufferings were indescribable. Fever parched his body, and the rope cut his flesh. He was rescued by a fearless lady, Senora Alemon, but for whom he would have died. After two months, finding that he would divulge nothing of the plans of his adopted republic, he was released without trial, and entered the war again at once.

After several successful battles, his vessel was shipwrecked, nearly all his friends were drowned, and he

escaped as by a miracle. His heart now became desolate. He says in his diary, "I felt the want of some one to love me, and a desire that such a one might be very soon supplied, as my present state of mind seemed insupportable." After all, the brave young captain was human, and cried out for a human affection. He had "always regarded woman as the most perfect of creatures"; but he had never thought it possible to marry with his adventurous life.

About this time he met a dark-haired, dark-eyed, young woman, tall and commanding, and as brave and fearless as himself. Anita belonged to a wealthy family, and her father was incensed at the union, though years after, when Garibaldi became famous, he wrote them a letter of forgiveness. They idolized each other; and the soldier's heart knew desolation no longer, come now what would. She stood beside him in every battle, waving her sword over her head to encourage the men to their utmost. When a soldier fell dead at her feet, she seized his carbine, and kept up a constant fire. When urged by her husband to go below, because almost frantic with fear for her safety, she replied, "If I do, it will be but to drive out those cowards who have sought concealment there, and then return to the fight." In one of the land-battles she was surrounded by twenty or more of the enemy; but she put spurs to her horse, and dashed through their midst. At first they seemed dazed, as though she were something unearthly; then they fired, killing her animal, which fell heavily to the ground; and she was made a prisoner. Obtaining permission to search among the dead for her husband, and, not finding him, she determined to make her escape. That night, while they slept, she seized a horse, plunged into the forests, and for four days lived without food. On the last night,—a stormy one,—closely pursued by several

of the enemy, she urged her horse into a swollen river, five hundred yards broad, and seizing fast hold of his tail, the noble creature swam across, dragging her with him. After eight days she reached her agonized husband, and their joy was complete.

After a year or more of battles and hardships, their first child, Menotti, was born, named for the great Italian Liberal. Garibaldi, fighting for a poor republic, destitute of everything for his wife and child, started across the marshes to purchase a few articles of clothing. In his absence, their little company was attacked by the Imperialists, and Anita mounted her saddle in a pitiless storm, and fled to the woods with her twelve-days-old infant. Three months later the child came near dying, the mother carrying him in a handkerchief tied round her neck, and keeping him warm with her breath, as they forded swamps and rivers.

After six years of faithful service for the South American Republic, Garibaldi determined to settle down to a more quiet life, with his little family, and sought a home at Montevideo, where he took up his former occupation of teaching. But he was soon drawn into war again, and his famous "Italian Legion," of about four hundred men, made for themselves a record throughout Europe and America for bravery and success against fearful odds. The grateful people made Garibaldi "General," and placed a large tract of land at the disposal of the Legion; but the leader said, "In obedience to the cause of liberty alone did the Italians of Montevideo take up arms, and not with any views of gain or advancement," and the gift was declined. Yet so poor was the family of Garibaldi, that they used to go to bed at sunset because they had no candles; and his only shirt he had given to a companion in arms. When his destitution became known, the minister of war sent him one



GIUSEPPE GARIBALDI

hundred dollars. He accepted half for Anita and her little ones, and begged that the other half might be given to a poor widow.

Fourteen years had gone by since he left Italy under sentence of death. He was now forty-one, in the prime of his life and vigor. Italy had become ripe for a revolution. Charles Albert, King of Sardinia, had declared himself ready to give constitutional liberty to his people, and to help throw off the Austrian yoke. Garibaldi believed that his hour had come, and saying good-bye to the Montevideans, who were loathe to part with him, he took fifty-six of his brave Italian Legion, and sailed for Nice, in the ship *Esperanza*. His beloved Anita improvised a Sardinian flag, made from a counterpane, a red shirt, and a bit of old green uniform; and the little company gave themselves to earnest plans and hopes. They met a hearty reception on their arrival; Garibaldi's mother taking Anita and her three children, Menotti, Meresita, and Ricciotti, to her home. General Garibaldi at once presented himself before Charles Albert, and offered his services. He wore a striking costume, consisting of a cap of scarlet cloth, a red blouse, and a white cloak lined with red, with a dagger at his belt, besides his sword. The King, perhaps remembering that the brave soldier was once a Republican in sentiment, made the great mistake of declining his aid. Nothing daunted, he hurried to Milan, only to find that the weak King had yielded it to Austria. Charles Albert soon abdicated in favor of his son Victor Emmanuel, and died from sorrow and defeat.

Meantime Rome had declared herself a Republic, and Pius IX. had fled the city. Garibaldi was asked to defend her, and entered with his troops, April 28, 1849. England and France were urged to remain neutral, while Rome fought for freedom. But alas! Louis Napoleon,

then President of the French Republic, desired to please the Papal party, and sent troops to reinstate the Pope! When Rome found that this man at the head of a republic was willing to put a knife to her throat, her people fought like tigers. They swarmed out of the workshops armed with weapons of every kind, while women urged them on with applause. For nearly three months Rome held out against France and Austria, Garibaldi showing himself an almost superhuman leader, and then the end came. Pius IX. re-entered the city, and the Republic was crushed by monarchies.

When all was lost, Garibaldi called his soldiers together, and, leaping on horseback, shouted, "Venice and Garibaldi do not surrender. Whoever will, let him follow me! Italy is not yet dead!" and he dashed off at full speed. By lonely mountain-paths, he, with Anita and about two hundred of his troops, arrived on the shore of the Adriatic, where thirteen boats were waiting to carry them to Venice. Nine were soon taken by the Austrians, the rest escaping, though nearly all were finally captured and shot at once. The General and his wife escaped to a cornfield, where she lay very ill, her head resting on his knee. Some peasants, though fearful that they would be detected by the Austrians, brought a cart, and carried the dying wife to the nearest cottage, where, as soon as she was laid upon the bed, she breathed her last, leaning on Garibaldi's arm. Overwhelmed by the loss of his idol, he seemed benumbed, with no care whether he was made a prisoner or not. At last, urged for the sake of Italy to flee, he made the peasants promise to bury Anita under the shade of the pine grove near by, and, hunted like a robber from mountain to mountain, he found a hiding-place among the rocks of the Island of Caprera. There was nothing left now but to seek a refuge in the great American Republic.

Landing in New York, the noble general asked aid from no one, but believing, as all true-minded persons believe, that any labor is honorable, began to earn his living by making candles. What a contrast between an able general working in a tallow factory, and some proud young men and women who consent to be supported by friends, and thus live on charity! Woe to America if her citizens shall ever feel themselves too good to work!

For a year and a half he labored patiently, his children three thousand miles away with his mother. Then he became captain of a merchant vessel between China and Peru. When told that he could bring some Chinese slaves to South America in his cargo, he refused, saying, "Never will I become a trafficker in human flesh." America might buy and sell four millions of human beings, but not so Garibaldi. After four years he decided to return to Italy. With the little money he had saved, he bought half the rocky island of Caprera, five miles long, off the coast of Sardinia, whose boulders had once sheltered him, built him a one-story plain house, and took his three children there to live, his mother having died.

Meantime Cavour, the great Italian statesman, had not been idle in diplomacy. The Crimean War had been fought, and Italy had helped England and France against Russia. When Napoleon III. went to war with Austria in 1859, Cavour was glad to make Italy his ally. He called Garibaldi from Caprera, and made him Major-General of the Alps. At once the red blouse and white cloak seemed to inspire the people with confidence. Lombardy sprang to arms. Every house was open, and every table spread for the Liberators. And then began a series of battles, which, for bravery and dash and skill, made the name of Garibaldi the terror of Austria, and the hope and pride of Italy. Tuscany, Modena, Parma,

and Lucca declared for King Victor Emmanuel. The battles of Magenta and Solferino made Austria bite the dust, and gladly give up Lombardy.

At last it seemed as if Italy were to be redeemed and reunited. Garibaldi started with his famous "Mille," or thousand men, to release the two Sicilies from the hated rule of Francis, the son of Ferdinand II. The first battle was fought at Palermo, the Neapolitans who outnumbered the troops of Garibaldi four to one being defeated after four hours' hard fighting. Then the people dared to show their true feelings. Peasants flocked in from the mountains, and ladies wore red dresses and red feathers. When the cars carried the soldiers from one town to another, the people crowded the engine, and shouted themselves hoarse. Drums were beaten, and trumpets blown, and women pressed forward to kiss the hand or touch the cloak of the Lion of Italy. He was everywhere the bravest of the brave. Once when surrounded by four dragoons, who called upon him to surrender, he drew his sword, and said, "I am Garibaldi; you must surrender to me."

And yet amid all this honor and success in war, and supremacy in power, as he was the Dictator, he was so poor that he would wash his red shirt in a brook, and wait for it to dry while he ate his lunch of bread and water, with a little fruit. No wonder the Sicilians believed him to be a second Messiah, and the French that he could shake the bullets from his body into his loose red shirt, and empty them out at his leisure! The sailor boy had become the hero of all who loved liberty the world over. When the war was ended, he resigned his Dictatorship, handed the two Sicilies over to his sovereign, distributed medals to his devoted soldiers, and returned to his island home at Caprera, with barely three dollars in his pocket, having borrowed one hundred to

pay his debts. How rarely does any age produce such a man as Garibaldi!

But Rome was not yet the capital of Italy. The hero could not rest while the city was governed by a Pope. At last, tired of waiting for the king to take action, he started with three thousand men for Rome. Victor Emmanuel, fearing to offend France, if the Pope were molested, sent the royal troops against Garibaldi at Aspromonte, who badly wounded him, and carried him to a prison on the Gulf of Spezzia. The people, indignant at the Government, crowded around him, bearing gifts, and kissing the hem of his raiment. They even bored a hole in the door of the prison, that they might catch a glimpse of their idol, as he lay on his iron bedstead, a gift from an English friend.

After his release and return to Caprera, he visited England in 1864, the whole country doing him honor. Stations were gaily decorated, streets arched with flowers, ladies dressed in red; the Duke of Sutherland entertained him; London gave him the freedom of the city; Tennyson made him his guest at the Isle of Wight; and crowds made it scarcely possible for him to appear on the public thoroughfares. He refused to receive a purse of money from his friends, and went back to Caprera, majestic in his unselfishness.

Again Italy called him to help her in her alliance with Prussia against Austria in 1866, and again he fought nobly. The year following he attempted to take Rome, but was a second time arrested and imprisoned for fear of Napoleon III. When that monarch fell at Sedan, and the French troops were withdrawn from the Eternal City, Victor Emmanuel entered without a struggle, and Rome was free.

In 1874, after helping the French Republic, the brave Spartan was elected to Parliament. He was now sixty-

seven. As he entered Rome, the streets were blocked with people, who several times attempted to remove the horses, and draw the carriage themselves. Ah! if Anita had only been there to have seen this homage of a grateful nation. He entered the Senate House on the arm of his son Menotti, and when he rose in his red shirt and gray cloak to take the oath, so infirm that he was obliged to be supported by two friends, men wept as they recalled his struggles, and shouted frantically as he took his seat.

Seven years longer the grand old man lived at Caprera, now beautified with gifts from all the world, the recipient of a thank-offering of \$10,000 yearly from Italy. Around him were Francesca, whom he married late in life, and their two children whom he idolized,—Manlio and Clelia. He spent his time in writing several books, in tilling the soil, and in telling visitors the wonderful events of his life and of Anita.

On June 2, 1882, all day long he lay by the window, looking out upon the sea. As the sun was setting, a bird alighted on the sill, singing. The great man stammered, "Quanti o allegro!" How joyful it is! and closed his eyes in death. He directed in his will that his body should be burned; but, at the request of the Government and many friends, it was buried at Caprera, to be transferred at some future time to Rome, now the capital of united Italy. Not alone does Italy honor her great Liberator, whom she calls the "most blameless and most beloved of men." Wherever a heart loves liberty, there will Garibaldi's name be cherished and honored.

ABRAHAM LINCOLN.

IN Gentryville, Indiana, in the year 1816, might have been seen a log cabin without doors or window-glass, a dirt floor, a bed made of dried leaves, and a stool or two and table formed of logs. The inmates were Thomas Lincoln, a good-hearted man who could neither read nor write; Nancy Hanks, his wife, a pale-faced, sensitive, gentle woman, strangely out of place in her miserable surroundings; a girl of nine, Sarah; and a tall, awkward boy of seven, Abraham.

The family had but recently moved from a similar cabin in Hardin County, Kentucky, cutting their way through the wilderness with an ax, and living off the game they could obtain with a gun.

Mrs. Lincoln possessed but one book in the world, the Bible; and from this she taught her children daily. Abraham had been to school for two or three months, at such a school as the rude country afforded, and had learned to read. Of quick mind and retentive memory, he soon came to know the Bible wellnigh by heart, and to look upon his gentle teacher as the embodiment of all the good precepts in the book. Afterward, when he governed thirty million people, he said, "All that I am or hope to be, I owe to my angel mother. Blessings on her memory!"

When he was ten years old, the saintly mother faded like a flower amid these hardships of pioneer life, died of consumption, and was buried in a plain box under the trees near the cabin. The blow for the girl, who also

died at twenty, was hard; but for the boy the loss was irreparable. Day after day he sat on the grave and wept. A sad, far-away look crept into his eyes, which those who saw him in the perils of his later life well remember.

Nine months after this, Abraham wrote a letter to Parson Elkins, a good minister whom they used to know in Kentucky, asking him to come and preach a funeral sermon over his mother. He came, riding on horseback over one hundred miles; and one bright Sabbath morning, when the neighbors from the whole country round had gathered, some in carts and some on horseback, he spoke, over the open grave, of the precious, Christian life of her who slept beneath. She died early, but not till she had laid well the foundation-stones of one of the grandest characters in history.

The boy, communing with himself, longed to read and know something beyond the stumps between which he planted his corn. He borrowed a copy of Bunyan's "Pilgrim's Progress," and read and re-read it till he could repeat much of it. Then some one loaned him "Æsop's Fables" and "Robinson Crusoe," and these he pored over with eager delight. There surely was a great world beyond Kentucky and Indiana, and perhaps he would some day see it.

After a time Thomas Lincoln married a widow, an old friend of Nancy Hanks, and she came to the cabin, bringing her three children; besides, she brought what to Abraham and Sarah seemed unheard-of elegance,—a bureau, some chairs, a table, and bedding. Abraham had heretofore climbed to the loft of the cabin on pegs, and had slept on a sack filled with corn-husks: now a real bed would seem indeed luxurious.

The children were glad to welcome the new mother to

the desolate home; and a good, true mother she became to the orphans. She put new energy into her somewhat easy-going husband, and made the cabin comfortable, even attractive. What was better still, she encouraged Abraham to read more and more, to be thorough, and to be somebody. Besides, she gave his great heart something to love, and well he repaid the affection.

He now obtained a much-worn copy of Weems's "Life of Washington," and the little cabin grew to be a paradise, as he read how one great man had accomplished so much. The barefoot boy, in buckskin breeches so shrunken that they reached only half-way between the knee and ankle, actually asked himself whether there were not some great place in the world for him to fill. No wonder, when, a few days after, making a noise with some of his fun-loving companions, a good woman said to him, "Now, Abe, what on earth do you s'pose'll ever become of ye? What'll ye be good for if ye keep a-goin' on in this way?" He replied slowly, "Well, I reckon I'm goin' to be President of the United States one of these days."

The treasured "Life of Washington" came to grief. One stormy night the rain beat between the logs of the cabin, and flooded the volume as it lay on a board upheld by two pegs. Abraham sadly carried it back to its owner, and worked three days, at twenty-five cents a day, to pay damages, and thus made the book his own.

The few months of schooling had already come to an end, and he was "living out," hoeing, planting, and chopping wood for the farmers, and giving the wages to his parents. In this way, in the daytime he studied human nature, and in the evenings he read "Plutarch's Lives" and the "Life of Benjamin Franklin." He was liked in these humble homes, for he could tend baby,

tell stories, make a good impromptu speech, recite poetry, even making rhymes himself, and could wrestle and jump as well as the best.

While drinking intoxicants was the fashion all about him, taught by his first mother not to touch them, he had solemnly carried out her wishes. But his tender heart made him kind to the many who, in this pioneer life, had been ruined through drink. One night, as he was returning from a house-raising, he and two or three friends found a man in the ditch benumbed with the cold, and his patient horse waiting beside him. They lifted the man upon the animal, and held him on till they reached the nearest house, where Abraham cared for him through the night, and thus saved his life.

At eighteen he had found a situation in a small store, but he was not satisfied to stand behind a counter; he had read too much about Washington and Franklin. Fifteen miles from Gentryville, courts were held at certain seasons of the year; and when Abraham could find a spare day he walked over in the morning and back at night, listening to the cases. Meantime he had borrowed a strange book for a poor country-lad,—“The Revised Statutes of Indiana.”

One day a man on trial for murder had secured the able lawyer, John A. Breckenridge, to defend him. Abraham listened as he made his appeal to the jury. He had never heard anything so eloquent. When the court adjourned the tall, homely boy, his face beaming with admiration for the great man, pressed forward to grasp his hand; but, with a contemptuous air, the lawyer passed on without speaking. Thirty years later the two met in Washington, when Abraham Lincoln was the President of the United States; and then he thanked Mr. Breckenridge for his great speech in Indiana.

In March, 1828, the long-hoped-for opportunity to

see the world outside of Gentryville had come. Abraham was asked by a man who knew his honesty and willingness to work, to take a flat-boat down the Mississippi River to New Orleans. He was paid only two dollars a week and his rations; and as a flat-boat could not come up the river, but must be sold for lumber at the journey's end, he was given passage back on a river steamer. The big-hearted, broad-shouldered youth, six feet and four inches tall, had seen in this trip what he would never forget; had seen black men in chains, and men and women sold like sheep in the slave-marts of New Orleans. Here began his horror of human slavery, which years after culminated in the Emancipation Proclamation.

Two years later, when he had become of age, Abraham helped move his father's family to Illinois, driving the four yoke of oxen which drew the household goods over the muddy roads and through the creeks. Then he joined his adopted brothers in building a log house, plowed fifteen acres of prairie land for corn, split rails to fence it in, and then went out into the world to earn for himself, his scanty wages heretofore belonging legally to his father. He did not always receive money for his work, for once, for a Mrs. Miller, he split four hundred rails for every yard of brown jeans, dyed with white walnut bark, necessary to make a pair of trousers.

He had no trade, and no money, and must do whatever came to hand. For a year he worked for one farmer and another, and then he and his half-brother were hired by a Mr. Offutt to build and take a flat-boat to New Orleans. So pleased was the owner, that on Abraham's return, he was at once engaged to manage a mill and store at New Salem. Here he went by the name of "Honest Abe," because he was so fair in his dealings. On one occasion, having sold a woman a bill of goods amounting to two dollars and six and a quarter cents, he

found that in adding the items, he had taken six and a quarter cents too much. It was night, and locking the store, he walked two or three miles to return the money to his astonished customer. Another time a woman bought half a pound of tea. He discovered afterward that he had used a four-ounce weight on the scales, and at once walked a long way to deliver the four ounces which were her due. No wonder the world, like Diogenes, is always looking for an honest man.

He insisted on politeness before women. One day as he was showing goods, a boorish man came in and began to use profanity. Young Lincoln leaned over the desk, and begged him to desist before ladies. When they had gone, the man became furious. Finding that he really desired to fight, Lincoln said, "Well, if you must be whipped, I suppose I may as well whip you as any other man," and suing the action to the word, gave him a severe punishing. The man became a better citizen from that day, and Lincoln's life-long friend.

Years afterward, when in the Presidential chair, a man used profanity in his presence, he said, "I thought Senator C. had sent me a gentleman. I was mistaken. There is the door, and I wish you good-night."

Hearing that a grammar could be purchased six miles away, the young store-keeper walked thither and obtained it. When evening came, as candles were too expensive for his limited wages, he burnt one shaving after another to give light, and thus studied the book which was to be so valuable in after years, when he should stand before the great and cultured of the land. He took the *Louisville Journal*, because he must be abreast of the politics of the day, and made careful notes from every book he read.

Mr. Offutt soon failed, and Abraham Lincoln was again adrift. War had begun with Blackhawk, the chief

of the Sacs, and the Governor of Illinois was calling for volunteers. A company was formed in New Salem, and "Honest Abe" was chosen captain. He won the love of his men for his thoughtfulness of them rather than himself, and learned valuable lessons in military matters for the future. A strange thing now happened,—he was asked to be a candidate for the State Legislature! At first he thought his friends were ridiculing him, and said he should be defeated as he was not widely known.

"Never mind!" said James Rutledge, the president of their little debating club. "They'll know you better after you've stumped the county. Any how, it'll do you good to try."

Lincoln made some bright, earnest stump speeches, and though he was defeated, the young man of twenty-three received two hundred and seventy-seven votes out of the two hundred and eighty cast in New Salem. This surely was a pleasant indication of his popularity. It was a common saying that "Lincoln had nothing, only plenty of friends."

The County-surveyor needed an assistant. He called upon Lincoln, bringing a book for him to study, if he would fit himself to take hold of the matter. This he did gladly, and for six weeks studied and recited to a teacher, thus making himself accurate for the work of mapping a new country. Whenever he had an hour's leisure, however, he was poring over his law-books, for he had fully made up his mind to be a lawyer.

He was modest, but ambitious, and was learning the power within him. But as though the developing brain and warm heart needed an extra stimulus, there came into his life, at this time, a beautiful affection, that left a deeper look in the far-away eyes, when it was over. Ann Rutledge, the daughter of a friend, was one of the most intelligent and lovely girls in New Salem. When

Lincoln came to her father's house to board, she was already engaged to a bright young man in the neighborhood, who, shortly before their intended marriage, was obliged to visit New York on business. He wrote back of his father's illness and death, and then his letters ceased.

Months passed away. Meantime the young lawyer had given her the homage of his strong nature. At first she could not bring herself to forget her recreant lover, but the following year, won by Lincoln's devotion, she accepted him. He seemed now supremely happy. He studied day and night, eager to fill such a place that Ann Rutledge would be proud of him. He had been elected to the Legislature, and, borrowing some money to purchase a suit of clothes, he walked one hundred miles to the State capitol. He did not talk much in the Assembly, but he worked faithfully upon committees, and studied the needs of his State.

The following summer days seemed to pass all too swiftly in his happiness. Then the shadows gathered. The girl he idolized was sinking under the dreadful strain upon her young heart. The latter part of August she sent for Lincoln to come to her bedside. What was said in that last farewell has never been known. It is stated by some that her former lover had returned, as fond of her as ever, his silence having been caused by a long illness. But on the twenty-fifth of August, death took her from them both.

Lincoln was overwhelmed with anguish; insane, feared and believed his friends. He said, "I can never be reconciled to have the snow, rains, and storms beat upon her grave." Years after he was heard to say, "My heart lies buried in the grave of that girl." A poem by William Knox, found and read at this time, became a favorite and a comfort through life,—

"Oh, why should the spirit of mortal be proud?"

Mr. Herndon, his law partner, said, "The love and death of that girl shattered Lincoln's purposes and tendencies. He threw off his infinite sorrow only by leaping wildly into the political arena." The memory of that love never faded from his heart, nor the sadness from his face.

The following year, 1837, when he was twenty-eight, he was admitted to the bar, and moved from New Salem to the larger town of Springfield, forming a partnership with Mr. J. P. Stuart of whom he had borrowed his law-books. Too poor even yet to pay much for board, he slept on a narrow lounge in the law-office. He was again elected to the legislature, and in the Harrison presidential campaign, was chosen one of the electors, speaking through the State for the Whig party. To so prominent a position, already, had come the backwoods boy.

Four years after Ann Rutledge's death, he married, Nov. 4, 1839, Mary Todd, a bright, witty, somewhat handsome girl, of good family, from Kentucky. She admired his ability, and believed in his success; he needed comfort in his utter loneliness. Till his death he was a true husband, and an idolizing father to his children,—Robert, Willie, and Tad (Thomas).

In 1846, seven years after his marriage, having steadily gained in the reputation of an honest, able lawyer, who would never take a case unless sure he was on the right side, Mr. Lincoln was elected to Congress by an uncommonly large majority. Opposed to the war with Mexico, and to the extension of slavery, he spoke his mind fearlessly. The "Compromise measures of 1850," by which, while California was admitted as a free State, and the slave-trade was abolished in the District of Columbia, the Fugitive Slave Law was passed, giving the owners of slaves the right to recapture them in any free State,

had disheartened all lovers of freedom. Lincoln said gloomily to his law partner, Mr. Herndon, "How hard, oh, how hard it is to die and leave one's country no better than if one had never lived for it!"

His father died about this time, his noble son sending him this message, "to remember to call upon and confide in our great and good and merciful Maker, who will not turn away from him in any extremity. He notes the fall of the sparrow, and numbers the hairs of our heads; and He will not forget the dying man who puts his trust in Him."

In 1854, through the influence of Stephen A. Douglas, a brilliant senator from Illinois, the Kansas-Nebraska Act was passed, whereby those States were left to judge for themselves whether they would have slaves or not. But by the Missouri Compromise of 1820, it was expressly stated that slavery should be forever prohibited in this locality. The whole North grew to white heat. When Douglas returned to his Chicago home the people refused to hear him speak. Illinois said, "His arguments must be answered, and Abraham Lincoln is the man to answer them!"

At the State Fair at Springfield, in October, a great company were gathered. Douglas spoke with marked ability and eloquence, and then on the following day, Abraham Lincoln spoke for three hours. His heart was in his words. He quivered with emotion. The audience were still as death, but when the address was finished, men shouted and women waved their handkerchiefs. Lincoln and the right had triumphed. After this, the two men spoke in all the large towns of the State, to immense crowds. The Kansas-Nebraska Bill worked out its expected results. Blood flowed in the streets, as pro-slavery and anti-slavery men contested the ground, newspaper offices were torn down by mobs, and Douglas

lost the great prize he had in view,—the Presidency of the United States.

When the new party, the Republican, held its second convention in Philadelphia, June 17, 1856, Abraham Lincoln received one hundred and ten votes for Vice President. What would Nancy Hanks Lincoln have said if she could have looked now upon the boy to whom she taught the Bible in the log cabin!

An incident occurred about this time which increased his fame. A man was murdered at a camp-meeting, and two young men were arrested. One was a very poor youth, whose mother, Hannah Armstrong, had been kind to Lincoln in the early years. She wrote to the prominent lawyer about her troubles, because she believed her son to be innocent. The trial came on. The people were clamorous for Armstrong to be hanged. The principal witness testified that "by the aid of the brightly shining moon, he saw the prisoner inflict the death-blow with a slung-shot."

After careful questioning, Mr. Lincoln showed the perjury of the witness, by the almanac, no moon being visible on the night in question. The jury were melted to tears by the touching address, and their sympathy went out to the wronged youth and his poor old mother, who fainted in his arms. Tears, too, poured down the face of Mr. Lincoln, as the young man was acquitted. "Why, Hannah," he said, when the grateful woman asked what she should try to pay him, "I shan't charge you a cent; never." She had been well repaid for her friendliness to a penniless boy.

The next year he was invited to deliver a lecture at Cooper Institute, New York. He was not very well known in the East. He had lived unostentatiously in the two-story frame-house in Springfield, and when seen at all by the people, except in his addresses, was usually

drawing one of his babies in a wagon before his door, with hat and coat off, deeply buried in thought. When the crowd gathered at Cooper Institute, they expected to hear a fund of stories and a "Western Stump speech." But they did not hear what they expected. They heard a masterly review of the history of slavery in this country, and a prophecy concerning the future of the slavery question. They were amazed at its breadth and its eloquence. The *New York Tribune* said, "No man ever before made such an impression on his first appeal to a New York audience."

After this Mr. Lincoln spoke in various cities to crowded houses. A Yale professor took notes and gave a lecture to his students on the address. Surprised at his success among learned men, Mr. Lincoln once asked a prominent professor "what made the speeches interest?"

The reply was, "The clearness of your statements, the unanswerable style of your reasoning and your illustrations, which were romance, and pathos, and fun, and logic, all welded together."

Mr. Lincoln said, "I am very much obliged to you for this. It throws light on a subject which has been dark to me. Certainly I have had a wonderful success for a man of my limited education."

The sabbath he spent in New York, he found his way to the Sunday-school at Five Points. He was alone. The superintendent noticing his interest, asked him to say a few words. The children were so pleased that when he attempted to stop, they cried, "Go on, oh! do go on!" No one knew his name, and on being asked who he was, he replied, "Abraham Lincoln of Illinois." After visiting his son Robert at Harvard College, he returned home.

When the Republican State Convention met, May 9, 1860, at Springfield, Ill., Mr. Lincoln was invited to a

seat on the platform, and as no way could be made through the dense throng, he was carried over the people's heads. Ten days later, at the National Convention at Chicago, though William H. Seward of New York was a leading candidate, the West gained the nomination, with their idolized Lincoln. Springfield was wild with joy. When the news of his success was carried to him, he said quietly, "Well, gentlemen, there's a little woman at our house who is probably more interested in this dispatch than I am; and if you will excuse me, I will take it up and let her see it."

The resulting canvass was one of the most remarkable in our history. The South said, "War will result if he is elected." The North said, "The time has come for decisive action." The popular vote for Abraham Lincoln was nearly two millions (1,857,610), while Stephen A. Douglas received something over a million (1,291,574). The country was in a fever of excitement. The South made itself ready for war by seizing the forts. Before the inauguration most of the Southern States had seceded.

Sad farewells were uttered as Mr. Lincoln left Springfield for Washington. To his law partner he said, "You and I have been together more than twenty years, and have never passed a word. Will you let my name stay on the old sign till I come back from Washington?"

The tears came into Mr. Herndon's eyes, as he said, "I will never have any other partner while you live," and he kept his word. Old Hannah Armstrong told him that she should never see him again; that something told her so; his enemies would assassinate him. He smiled and said, "Hannah, if they do kill me, I shall never die another death."

He went away without fear, but feeling the awful responsibility of his position. He found an empty treasury and the country drifting into the blackness of

war. He spoke few words, but the lines grew deeper on his face, and his eyes grew sadder.

In his inaugural address he said, "In your hands, my dissatisfied-countrymen, and not in mine, is the momentous issue of civil war. The government will not assail you. You can have no conflict without being yourselves the aggressors. . . . Physically speaking we cannot separate."

The conflict began April 12, 1861, by the enemy firing on Fort Sumter. That sound reverberated throughout the North. The President called for seventy-five thousand men. The choicest from thousands of homes quickly responded. Young men left their college-halls and men their places of business. "The Union must and shall be preserved," was the eager cry. Then came the call for forty-two thousand men for three years.

The President began to study war in earnest. He gathered military books, sought out on maps every creek and hill and valley in the enemy's country, and took scarcely time to eat or sleep. May 24, the brilliant young Colonel Elsworth had been shot at Alexandria by a hotel-keeper, because he pulled down the secession flag. He was buried from the East room in the White House, and the North was more aroused than ever. The press and people were eager for battle, and July 21, 1861, the Union army, under General McDowell, attacked the Confederates at Bull Run and was defeated. The South was jubilant, and the North learned, once for all, that the war was to be long and bloody. Congress, at the request of the President, at once voted five hundred thousand men, and five hundred million dollars to carry on the war.

Vast work was to be done. The Southern ports must be blockaded, and the traffic on the Mississippi River discontinued. A great and brave army of Southerners,

fighting on their own soil, every foot of which they knew so well, must be conquered if the nation remained intact. The burdens of the President grew more and more heavy. Men at the North, who sympathized with the South,—for we were bound together as one family in a thousand ways,—said the President was going too far in his authority; others said he moved too slowly, and was too lenient to the slave power. The South gained strength from the sympathy of England, and only by careful leadership was war avoided with that country.

General McClellan had fought some hard battles in Virginia—Fair Oaks, Mechanicsville, Malvern Hill, and others—with varying success, losing thousands of men in the Chickahominy swamps, and after the battle of Antietam, Sept. 17, 1862, one of the severest of the war, when each side lost over ten thousand men, he was relieved of his command, and succeeded by General Burnside. There had been some successes at the West under Grant, at Fort Donelson and Shiloh, and at the South under Farragut, but the outlook for the country was not hopeful. Mr. Lincoln had met with a severe affliction in his own household. His beautiful son Willie had died in February. He used to walk the room in those dying hours, saying sadly, "This is the hardest trial of my life; why is it? why is it?"

This made him, perhaps, even more tender of the lives of others' sons. A young sentinel had been sentenced to be shot for sleeping at his post; but the President pardoned him, saying, "I could not think of going into eternity with the blood of the poor young man on my skirts. It is not to be wondered at that a boy raised on a farm, probably in the habit of going to bed at dark, should, when required to watch, fall asleep, and I cannot consent to shoot him for such an act." This youth was found among the slain on the field of Fredericksburg,

wearing next his heart a photograph of his preserver, with the words, "God bless President Lincoln."

An army officer once went to Washington to see about the execution of twenty-four deserters, who had been sentenced by court-martial to be shot. "Mr. President," said he, "unless these men are made an example of, the army itself is in danger. Mercy to the few is cruelty to the many."

"Mr. General," was the reply, "there are already too many weeping widows in the United States. For God's sake, don't ask me to add to the number, for I won't do it." At another time he said, "Well, I think the boy can do us more good above ground than under ground."

A woman in a faded shawl and hood came to see the President, begging that, as her husband and all her sons—three—had enlisted, and her husband had been killed, he would release the oldest, that he might care for his mother. Mr. Lincoln quickly consented. When the poor woman reached the hospital where her boy was to be found, he was dead. Returning sadly to Mr. Lincoln, he said, "I know what you wish me to do now, and I shall do it without your asking; I shall release your second son. . . . Now *you* have one, and *I* one of the other two left: that is no more than right." Tears filled the eyes of both as she reverently laid her hand on his head, saying, "The Lord bless you, Mr. President. May you live a thousand years, and always be at the head of this great nation!"

Through all these months it had become evident that slavery must be destroyed, or we should live over again these dreadful war-scenes in years to come. Mr. Lincoln had been waiting for the right time to free the slaves. General McClellan had said, "A declaration of radical views, especially upon slavery, will rapidly disintegrate our present armies"; but Sept. 22, 1862, Mr. Lincoln told

his Cabinet, "I have promised my God that I will do it"; and he issued the immortal Emancipation Proclamation, by which four million human beings stepped out from bondage into freedom. He knew what he was doing. Two years afterward he said, "It is the central act of my administration, and the great event of the nineteenth century."

The following year, 1863, brought even deeper sorrows. The "Draft Act," by which men were obliged to enter the army when their names were drawn, occasioned in July a riot in New York City, with the loss of many lives. Grant had taken Vicksburg on July 4, and General Meade, had won the dreadful three days' fight at Gettysburg, July 1-4, with a loss of more than twenty thousand on either side; but the nation was being held together at a fearful cost. When Mr. Lincoln announced to the people the victory at Gettysburg, he expressed the desire that, in the customary observance of the Fourth of July, "He whose will, not ours, should everywhere be done, be everywhere revered with profoundest gratitude." He revered God, himself, most devoutly. "I have been driven many times upon my knees," he said, "by the overwhelming conviction that I had nowhere else to go. My own wisdom and that of all about me seemed insufficient for that day."

On Nov. 19, of this year, this battle-field was dedicated, with solemn ceremonies, as one of the national cemeteries. Mr. Lincoln made a very brief address, in words that will last while America lasts, "The world will little note, nor long remember, what we say here; but it can never forget what they did here. It is for us, the living, rather, to be dedicated here to the unfinished work which they who fought here have thus far so nobly advanced. It is, rather, for us to be here dedicated to the great task remaining for us, that from these honored dead we take

increased devotion to the cause for which they gave the last full measure of devotion; that we here highly resolve that these dead shall not have died in vain; that this nation, under God, shall have a new birth of freedom, and that the government of the people, by the people, and for the people, shall not perish from the earth."

Emerson says of these words, "This, and one other Amercian speech, that of John Brown to the court that tried him, and a part of Kossuth's speech at Birmingham, can only be compared with each other, and no fourth."

The next year, Feb. 29, 1864, the Hero of Vicksburg was called to the Lieutenant-Generalship of the army, and for the first time Mr. Lincoln felt somewhat a sense of relief from burdens. He said, "Wherever Grant is, things move." He now called for five hundred thousand more men, and the beginning of the end was seen. Sherman swept through to the sea. Grant went below Richmond, where he said, "I propose to fight it out on this line if it takes all summer."

Mr. Lincoln had been re-elected to the Presidency for a second term, giving that beautiful inaugural address to the people, "With malice toward none, with charity for all, with firmness in the right, as God gives us to see the right, let us strive on to finish the work we are in; to bind up the nation's wounds; to care for him who shall have borne the battle, and for his widows and orphans; to do all which may achieve and cherish a just and lasting peace among ourselves and with all nations." On April 9, 1865, Lee surrendered to Grant at Appomattox, and the long war was ended. The people gathered in their churches to praise God amid their tears. Abraham Lincoln's name was on every lip. The colored people said of their deliverer, "He is eberywhere. He is like de bressed Lord; he walks de waters and de land."

An old colored woman came to the door of the White

House and met the President as he was coming out, and said she wanted to see "Abraham the Second."

"And who was Abraham the First?" asked the good man.

"Why, Lor' bless you, we read about Abraham de First in de Bible, and Abraham de Second is de President."

"Here he is!" said the President, turning away to hide his tears.

Well did the noble-hearted man say, "I have never willingly planted a thorn in any man's bosom."

Five days after the surrender of General Lee, Mr. Lincoln went to Ford's Theatre, because it would rest him and please the people to see him. He used to say, "The tired part of me is inside and out of reach. . . . I feel a presentiment that I shall not outlast the rebellion. When it is over, my work will be done."

While Mr. Lincoln was enjoying the play, John Wilkes Booth, an actor, came into the box behind him and fired a bullet into his brain; then sprang upon the stage, shouting "Sic semper tyrannis! The South is avenged!" The President scarcely moved in his chair, and, unconscious, was taken to a house near by, where he died at twenty-two minutes past seven, April 15, 1865. Booth was caught twelve days later, and shot in a burning barn, while trying to elude his captors.

Charles Sumner said, "There are no accidents in the Providence of God." Such lives as that of Abraham Lincoln are not accidents in American history. They are rather the great books from whose pages we catch inspiration, and in which we read God's purposes for the progress of the human race.

OLE BULL

IN the quaint old town of Bergen, Norway, so strange with its narrow streets, peculiar costumes, and open-hearted people, that no traveller can ever forget it, was born, Feb. 5, 1810, Ole Bull, the oldest in a family of ten children. His father was an able chemist, and his mother a woman of fine manners and intelligence. All the relatives were musical, and at the little gatherings for the purpose of cultivating this talent, the child Ole would creep under table or sofa, and listen enraptured for hours, often receiving a whipping when discovered.

He loved music intensely, fancying when he played alone in the meadows, that he heard nature sing, as the bluebells were moved among the grasses by the wind. When he was four years old, his uncle gave him a yellow violin, which he kissed with great delight, learning the notes at the same time as his primer. Although forbidden to play till study-hours were over, he sometimes disobeyed, and was punished both at home and at school.

Finally, at eight, through the good sense of his mother, a music-teacher was provided, and his father bought him a new red violin. The child could not sleep for thinking of it; so the first night after its purchase he stole into the room where it lay, in his night-clothes, to take one peep at the precious thing. He said years after, with tears in his eyes at the painful remembrance, "The violin was so red, and the pretty pearl screws did smile at me so! I pinched the strings just a little with my fingers. It smiled at me ever more and more. I took up the

bow and looked at it. It said to me it would be pleasant to try it across the strings. So I did try it, just a very, very little, and it did sing to me so sweetly. At first, I did play very soft. But presently I did begin a capriccio, which I like very much, and it do go ever louder and louder; and I forgot that it was midnight and that everybody was asleep. Presently I hear something crack! and the next minute I feel my father's whip across my shoulders. My little red violin dropped on the floor, and was broken. I weep much for it, but it did no good. They did have a doctor to it next day, but it never recovered its health."

Pitiful it is that sometimes parents are so lacking in judgment as to stifle the best things in a child's nature! Guiding is wise; forcing usually ends in disaster. In two years, Ole could play pieces which his teacher found it impossible to perform. He began to compose melodies, imitating nature in the song of birds, brooks, and in the roar of waterfalls; and would hide in caves or in clumps of bushes, where he could play his own weird improvisations. When he could not make his violin do as he wished, he would fling it away impetuously, and not touch it again for a long time. Then he would perhaps get up in the middle of the night, and play at his open window, forgetting that anybody might be awakened by it. Sometimes he played incessantly for days, scarcely eating or sleeping. He had no pleasure in fishing or shooting, on account of the pain inflicted,—a feeling seemingly common to noble and refined natures,—though he greatly enjoyed anything athletic.

At fourteen, having heard of Paganini, he went to his grandparent, of whom he was very fond, and said, "Dear grandmother, can't I have some of Paganini's music?"

"Don't tell any one," was the reply; "but I will try to buy a piece of his for you if you are a good child."

Shortly after this an old miser, of whom the Bergen boys were afraid, called Ole into his house one day as he was passing, and said, "Are you the boy that plays the fiddle?"

"Yes, sir,"

"Then come with me. I have a fiddle I bought in England, that I want to show you."

The fiddle needed a bridge and sounding-post, and these the boy gladly whittled out, and then played for the old man his favorite air, "God save the King." He was treated to cakes and milk, and promised to come again. The next afternoon, what was his surprise to receive four pairs of doves, with a blue ribbon around the neck of one, and a card attached bearing the name of "Ole Bull." This present was more precious than the diamonds he received in later years from the hands of royalty.

Ole's father, with a practical turn of mind, urged his being a clergyman, as he honored that profession, and well knew that music and art usually furnish a small bank account. A private tutor, Musæus by name, was therefore engaged. This man had the unique habit of kneeling down to pray before he whipped a boy, and asking that the punishment might redound to the good of the lad. He soon made up his mind that Ole's violin and theology were incompatible, and forbade his playing it. Ole and his brothers bore his harsh methods as long as possible, when one morning at half past four, as the teacher was dragging the youngest boy out of bed, Ole sprang upon him and gave him a vigorous beating. The smaller boys put their heads out from under the bed-clothes and cried out, "Don't give up, Ole! Don't give up! Give it to him with all your might!" The whole household soon appeared upon the scene, and though little

was said, the private feeling seemed to be that a salutary lesson had been imparted.

At eighteen, Ole was sent to the University of Christiania, his father beseeching him that he would not yield to his passion for music. On his arrival, some Bergen students asked him to play for a charitable association.

"But," said Ole, "my father has forbidden me to play."

"Would your father prevent your doing an act of charity?"

"Well, this alters the case a little, and I can write to him, and claim his pardon."

After this he played nearly all night at the home of one of the professors, saying to himself that his father would be pleased if the Faculty liked him, and the next morning failed in his Latin examination! In despair, he stated the case to the professor, who replied, "My good fellow, this is the very best thing that could have happened to you! Do you believe yourself fitted for a curacy in Finmark or a mission among the Laps? Certainly not! It is the opinion of your friends that you should travel abroad. Meanwhile, old Thrane having been taken ill, you are appointed *ad interim* Musical Director of the Philharmonic and Dramatic Societies." A month later, by the death of Thrane, he came into this position, having gained the pardon of his disappointed father.

But he was restless at Christiania. He desired to know whether he really had genius or not, and determined to go to Cassell, to see Louis Spohr, who was considered a master. The great man was not sufficiently great to be interested in an unknown lad, and coolly said, when Ole remarked politely, "I have come more than five hundred miles to hear you," "Very well, you can now go

to Nordhausen; I am to attend a musical festival there."

Ole went to the festival, and was so disappointed because the methods and interpretation were different from his own, that he resolved to go back to classic studies, feeling that he had no genius for music. Still he was not satisfied. He would go to Paris, and hear Berlioz and other great men. Giving three concerts at Trondhjem and Bergen, by which he made five hundred dollars, he found himself in possession of the needed funds. When he arrived in this great city, everybody was eagerly looking out for himself. Some were in pursuit of pleasure; but most, as is the case everywhere, were in pursuit of bread and shelter. Nobody cared to hear his violin. Nobody cared about his recommendations from far-off Norway. In vain he tried to make engagements. He had no one to speak for him, and the applicants were numberless.

Madam Malibran was singing nightly to crowded houses, and the poor violinist would now and then purchase one of the topmost seats, and listen to that marvellous voice. His money was gradually melting away. Finally, an elderly gentleman who boarded at the same house, having begged him to take what little money he possessed out of the bank, as it was not a safe place, stole every cent, together with Ole's clothes, and left him entirely destitute.

An acquaintance now told him of a boarding-place where there were several music-teachers, and gave security for his board for one month,—twelve dollars. Soon the friend and the boarding-mistress grew cold and suspicious. Nothing tries friendship like asking the loan of money. At last his condition becoming known to a person, whom he afterward learned was Vidocq, the noted Chief of Police, he was shown by him to a gaming-

table, where he made one hundred and sixty dollars. "What a hideous joy I felt," he said afterward; "what a horrid pleasure to hold in the hand one's own soul saved by the spoil of others!" He could not gamble again, though starvation actually stared him in the face.

Cholera was sweeping through the city, and had taken two persons from the house where he lodged. He was again penniless and wellnigh despairing. But he would not go back to Christiania. The river Seine looked inviting, and he thought death would be a relief. He was nervous and his brain throbbed. Finally he saw a placard in a window, "Furnished rooms to let." He was exhausted, but would make one more effort.

An elderly lady answered his query by saying that they had no vacant rooms, when her pretty granddaughter, Alexandrine Félicie, called out, "Look at him, grandmamma!" Putting on her glasses, the tears filled her eyes, as she saw a striking resemblance to her son who had died. The next day found him at Madam Villemillot's house, very ill of brain fever. When he regained consciousness, she assured him that he need not worry about the means for payment. When, however, the Musical Lyceum of Christiania learned of his struggles, they sent him eight hundred dollars.

Becoming acquainted about this time with Monsieur Lacour, a dealer in violins, who thought he had discovered that a certain kind of varnish would increase sweetness of tone, Ole Bull was requested to play on one of his instruments at a soirée, given by a Duke of the Italian Legation. An elegant company were present. The intense heat soon brought out the odor of assafoetida in the varnish. The young man became embarrassed and then excited, and played as though beside himself. The player was advertised, whether Monsieur Lacour's instruments were or not; for Marshal Ney's son, the Duke of

Montebello, at once invited him to breakfast, and presided over a concert for him, whereby the violinist made three hundred dollars. The tide had turned at last, and little Félicie Villeminot had done it with her "Look at him, grandmamma!"

As the Grand Opera was still closed to him, he made a concert tour through Switzerland and Italy. In Milan, one of the musical journals said, "He is not master of himself; he has no style; he is an untrained musician. If he be a diamond, he is certainly in the rough and unpolished."

Ole Bull went at once to the publisher and asked who had written the article. "If you want the responsible person," said the editor, "I am he."

"No," said the artist, "I have not come to call the writer to account, but to thank him. The man who wrote that article understands music; but it is not enough to tell me my faults; he must tell me how to rid myself of them."

"You have the spirit of the true artist," replied the journalist.

The same evening he took Ole Bull to the critic, a man over seventy, from whom he learned much that was valuable. He at once gave six months to study under able masters, before again appearing in public. He was, however, an earnest student all through life, never being satisfied with his attainments.

At Venice he was highly praised, but at Bologna he won the celebrity which continued through life. Malibran was to sing in two concerts, but feigned illness when she learned that the man she loved, De Beriot, was to receive a smaller sum than herself, and would not appear. The manager of the theatre was in despair. Meantime, in a poor hotel, in an upper room, Ole Bull was composing his concerto in the daytime, and playing on his violin at

night by his open window. Rossini's first wife heard the music, and said, "It must be a violin, but a divine one. That will be a substitute for De Beriot and Malibran. I must go and tell Zampieri" (the manager).

On the night of the concert, after Ole Bull had been two hours in bed from weariness, Zampieri appeared, and asked him to improvise. He was delighted, and exclaiming, "Malibran may now have her headaches," hurried the young artist off to the theatre. The audience was of course cold and disappointed till Ole Bull began to play. Then the people seemed to hold their breath. When the curtain fell, he almost swooned with exhaustion, but the house shook with applause. Flowers were showered upon him. He was immediately engaged for the next concert; a large theatre was offered him free of expense, one man buying one hundred tickets, and the admiring throng drew his carriage to the hotel, while a procession with torchlights acted as guard of honor.

Ole Bull had stepped into the glory of fame in a single night. Henceforth, while there was to be much of trial and disappointment, as come to all, he was to be forever the idol of two continents, drawing crowded houses, honored by the great, and universally mourned at his death. He had come to fame as by accident, but he had made himself worthy of fame.

Malibran at first seemed hurt at his wonderful success in her stead, but she soon became one of his warmest friends, saying, "It is your own fault that I did not treat you as you deserved. A man like you should step forth with head erect in the full light of day, that we may recognize his noble blood."

From here he played with great success at Florence and Rome, at the latter city composing his celebrated "Polacca Guerriera" in a single night, writing till four o'clock in the morning. It was first conceived while he

stood alone at Naples, at midnight, watching Mount Vesuvius aflame.

Returning to Paris, he found the Grand Opera open to him. Here, at his first performance, his *a*-string snapped; he turned deathly pale, but he transposed the remainder of the piece, and finished it on three strings. Meyerbeer, who was present, could not believe it possible that the string had really broken.

He was now twenty-six, famous and above want. What more fitting than that he should marry pretty Félicie Villeminot, and share with her the precious life she had saved? They were married in the summer of 1836, and their love was a beautiful and enduring one until her death twenty-six years afterward. Though absent from her much of the time necessarily, his letters breathe a pure and ardent affection. Going to England soon after, and being at the house of the Duke of Devonshire at Chatsworth, he writes, "How long does the time seem that deprives me of seeing you! I embrace you very tenderly. The word *home* has above all others the greatest charm for me."

In London, from three to seven thousand persons crowded to hear him. The *Times* said, "His command of the instrument, from the top to the bottom of the scale—and he has a scale of his own of three complete octaves on each string—is absolutely perfect." At Liverpool he received four thousand dollars for a single night, taking the place of Malibran, who had brought on a hemorrhage resulting in death, by forcing a tone, and holding it so long that the audience was astonished. Ole Bull came near sharing her fate. In playing "Polacca," the hall being large and the orchestra too strong, he ruptured a blood vessel, and his coat had to be cut from him.

In sixteen months he gave two hundred and seventy-

four concerts in the United Kingdom. Afterwards, at St. Petersburg, he played to five thousand persons, the Emperor sending him an autograph letter of affection, and the Empress an emerald ring set with one hundred and forty diamonds. Shortly after this his father died, speaking with pride of Ole, and thinking he heard divine music.

On his return to Norway, at the request of the King, he gave five concerts at Stockholm, the last netting him five thousand dollars. So moved was the King when Ole Bull played before him at the palace, that he rose and stood till the "Polacca" was finished. He presented the artist with the Order of Vasa, set in brilliants.

In Christiania, the students gave him a public dinner, and crowned him with laurel. He often played for the peasants here and in Bergen, and was beloved by the poor as by the rich. At Copenhagen he was presented at Court, the King giving him a snuff-box set in diamonds. Hans Andersen became his devoted friend, as did Thorwaldsen while he was in Rome. He now went to Cassell, and Spohr hastened to show him every attention, as though to make amends for his coldness when Ole Bull was poor and unknown. At Salzburg he invited the wife of Mozart to his concerts. For her husband he had surpassing admiration. He used to say that no mortal could write Mozart's "Requiem" and live.

While in Hungary, his first child, Ole, died. He wrote his wife, "God knows how much I have suffered! I still hope and work, not for myself,—for you, my family, my country, my Norway, of which I am proud."

All this time he was working very hard. He said, "I must correspond with the directors of the theatres; must obtain information regarding the people with whom I am to deal; I must make my appointments for concerts and rehearsals; have my music copied, correct the scores,

compose, play, travel nights. I am always cheated, and in everlasting trouble. I reproach myself when everything does not turn out for the best, and am consumed with grief. I really believe I should succumb to all these demands and fatigues if it were not for my drinking cold water, and bathing in it every morning and evening."

In November, 1843, urged by Fanny Elssler, he visited America. At first, in New York, some of the prominent violinists opposed him; but he steadily made his way. When Mr. James Gordon Bennett offered him the columns of the *Herald*, that he might reply to those who were assailing him, he said in his broken English, "I tink, Mr. Bennett, it is best tey writes against me, and I plays against tem." Of his playing in New York, Mrs. Lydia Maria Child wrote, "His bow touched the strings as if in sport, and brought forth light leaps of sound, with electric rapidity, yet clear in their distinctness. He played on four strings at once, and produced the rich harmony of four instruments. While he was playing, the rustling of a leaf might have been heard; and when he closed, the tremendous bursts of applause told how the hearts of thousands leaped like one. His first audience were beside themselves with delight, and the orchestra threw down their instruments in ecstatic wonder."

From New York he took a successful trip South. That he was not effeminate while deeply poetic, a single incident will show. After a concert, a man came to him and said he wished the diamond in his violin bow, given him by the Duke of Devonshire. Ole Bull replied that as it was a gift, he could neither sell it nor give it away.

"But I am going to have that stone!" said the man as he drew a bowie knife from his coat. In an instant Ole Bull had felled the man to the floor with the edge of his

hand across his throat. "The next time I would kill you," said the musician, with his foot on the man's chest; "but you may go now." So much did the ruffian admire the muscle and skill of the artist, that he begged him to accept the knife which he had intended to use upon him.

During this visit to America he gave two hundred concerts, netting him, said the *New York Herald*, fully eighty thousand dollars, besides twenty thousand given to charitable associations, and fifteen thousand paid to assistant artists. "No artist has ever visited our country and received so many honors. Poems by the hundreds have been written to him; gold vases, pencils, medals, have been presented to him by various corporations. His whole remarkable appearance in this country is really unexampled in glory and fame," said the same newspaper. Ole Bull was kindness itself to the sick or afflicted. Now he played for Alice and Phœbe Carey, when unable to leave their home, and now for insane and blind asylums and at hospitals. He loved America, and called himself "her adopted son."

On his return to Norway, after great success in Spain, the Queen bestowing upon him the order of Charles III. and the Portuguese order of Christus, he determined to build a National Theatre in Bergen, his birthplace, for the advancement of his nation in the drama and in music. By great energy, and the bestowal of a large sum of money, the place was opened in 1850, Ole Bull leading the orchestra. But the Storting, or Parliament, declined to give it a yearly appropriation,—perhaps the development of home talent tended too strongly toward republicanism. The burden was too great for one man to carry, and the project did not prove a success.

The next plan of the philanthropist-musician was to buy one hundred and twenty-five thousand acres of land

on the Susquehanna River, in Pennsylvania, and "found a New Norway, consecrated to liberty, baptized with independence, and protected by the Union's mighty flag." Soon three hundred houses were built, a country inn, store, and church, erected by the founder. To pay the thousands needed for this enterprise he worked constantly at concert-giving, taking scarcely time to eat his meals. He laid out five new villages, made arrangements with the government to cast cannon for her fortresses, and took out patents for a new smelting-furnace.

While in California, where he was ill with yellow fever, a crushing blow fell upon him. He learned that he had purchased the land through a swindling company, his title was invalid, and his fortune was lost. He could only buy enough land to protect those who had already come from Norway, and had settled there, and soon became deeply involved in lawsuits. Hon. E. W. Stoughton of New York, who had never met Ole Bull personally, volunteered to assist him, and a few thousands were wrested from the defrauding agent.

On his return to Norway he was accused of speculating with the funds of his countrymen, which cut him to the heart. A little later, in 1862, his wife died, worn with ill health, and with her husband's misfortunes, and his son Thorvald fell from the mast of a sailing-vessel in the Mediterranean, and was killed.

In the Centennial year he returned to America, and nearly lost his life in a steamboat collision on the Ohio. He swam to land, saving also his precious violin. Two years afterward he was married to Miss Thorp of Madison, Wis., an accomplished lady much his junior in years, who has lived to write an admirable life of her illustrious husband. A daughter, Olea, came to gladden his home two years later. When he was sixty-six years old, he celebrated his birthday by playing his violin on

the top of the great pyramid, Cheops, at the suggestion of King Oscar of Norway and Sweden.

In the Centennial year he returned to America, and made his home at Cambridge, in the house of James Russell Lowell, while he was Minister to England. Here he enjoyed the friendship of such as Longfellow, who says of him in his "Tales of a Wayside Inn":—

The angel with the violin,
Painted by Raphael, he seemed,

And when he played, the atmosphere
Was filled with magic, and the ear
Caught echoes of that Harp of Gold,
Whose music had so weird a sound,
The hunted stag forgot to bound,
The leaping rivulet backward rolled,
The birds came down from bush and tree,
The dead came from beneath the sea,
The maiden to the harper's knee!"

The friend of the highest, he never forgot the lowest. When a colored barber in Hartford, a lad who was himself a good fiddler, heard Ole Bull play, the latter having sent him a ticket to his concert, he said, "Mister, can't you come down to the shop to-morrow to get shaved, and show me those tricks? I feel powerful bad."

And Ole Bull went to the shop, and showed him how the wonderful playing was accomplished.

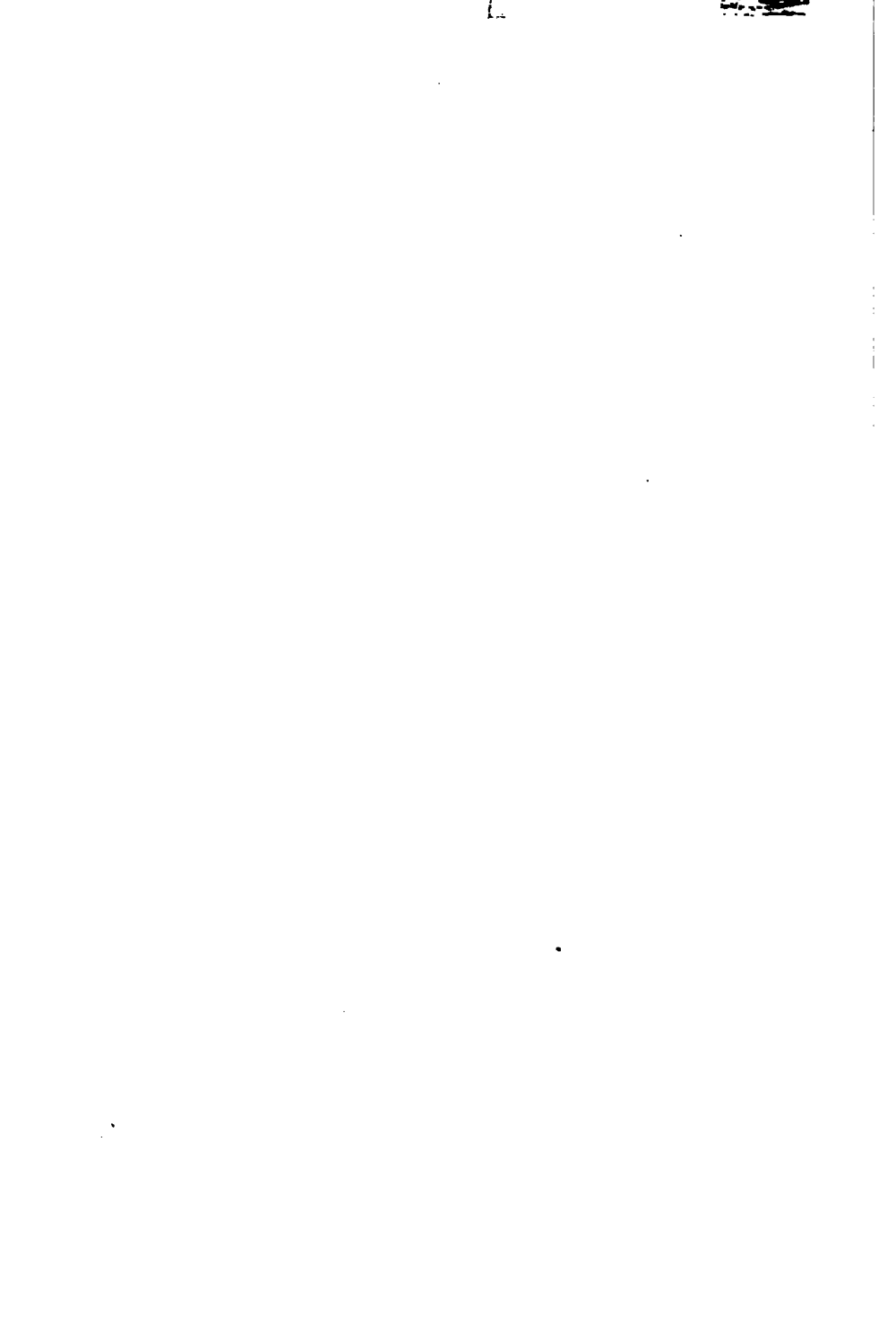
In 1880 Ole Bull sailed, for the last time, to Europe, to his lovely home at Lysö, an island in the sea, eighteen miles from Bergen. Ill on the voyage, he was thankful to reach the cherished place. Here, planned by his own hand, was his elegant home overlooking the ocean; here his choice music-room upheld by delicate columns and

curiously wrought arches; here the shell-roads he had built; and here the flower-beds he had planted. The end came soon, on a beautiful day full of sunshine.

The body lay in state in the great music-room till a larger steamer came to bear it to Bergen. This was met by a convoy of sixteen steamers ranged on either side; and as the fleet approached the city, all flags were at half-mast, and guns were fired, which re-echoed through the mountains. The quay was covered with juniper, and the whole front festooned with green. As the boat touched the shore, one of Ole Bull's inimitable melodies was played. Young girls dressed in black bore the trophies of his success, and distinguished men carried his gold crown and order, in the procession. The streets were strewn with flowers, and showered upon the coffin. When the service had been read at the grave by the pastor, Björnson, the famous author, gave an address. After the coffin had been lowered and the mourners had departed, hundreds of peasants came, bringing a green bough, a sprig of fern, or a flower, and quite filled the grave. Beautiful tribute to a beautiful life!



JEAN LOUIS MEISSONIER



JEAN LOUIS MEISSONIER

THE old maxim, that "the gods reward all things to labor," has had fit illustration in Meissonier. His was a life of constant, unvaried toil. He came to Paris a poor, unknown boy, and worked over fifty years, till he became a master in French art.

Jean Louis Ernest Meissonier was born at Lyons, in 1811. His early life was passed in poverty so grinding that the great artist never spoke of it, and in such obscurity that scarcely anything is known of his boyhood. At nineteen he came to Paris to try his fate in one of the great centres of the world. He, of course, found no open doors, nobody standing ready to assist genius. Genius must ever open doors for itself.

The lad was a close observer, and had learned to draw accurately. He could give every variety of costume, and express almost any emotion in the face of his subject. But he was unknown. He might do good work, but nobody wanted it. He used to paint by the side of Daubigny in the Louvre, it is said, for one dollar a yard. Later his "Amateurs in Painting," a chef-d'œuvre of six inches in size, was bought by Leon Say for six thousand dollars. Such is fame.

Time was so necessary in this struggle for bread, that he could sleep only every other night; and for six months his finances were so low, it is stated, that he existed on ten cents a week! No wonder the sorrows of those days were never mentioned!

His earliest work was painting the tops of bon-bon

boxes, and fans. Once he grew brave enough to take four little sepia drawings to an editor to illustrate a fairy tale in a magazine for children. The editor said the drawings were charming, but he could not afford to have them engraved, and so "returned them with thanks."

His first illustrations in some unknown journal were scenes from the life of "The Old Bachelor." In the first picture he is represented making his toilet before the mirror, his wig spread out on the table; in the second, dining with two friends; in the third, being abused by his housekeeper; in the fourth, on his death-bed, surrounded by greedy relations; and in the fifth, the servants ransacking the death-chamber for the property.

For a universal history he drew figures of Isaiah, St. Paul, and Charlemagne, besides almost numberless ornamental letters and headings of chapters. Of course he longed for more remunerative work, for fame; but he must plod on for months yet. He worked conscientiously, taking the greatest pains with every detail.

His first picture, exhibited in 1833, when he was twenty-two, called "The Visitors," an interior view of a house, with an old gentleman receiving two visitors, all dressed in the costume of James I., admirable for its light and shade, was bought by the Society of the Friends of Art, for twenty dollars. Two years later he made illustrations for the Bible of the Sieur Raymond, of Holofernes invading Judea, and Judith appearing before Holofernes. For "Paul and Virginia" he made forty-three beautiful landscapes. "They contain evidence of long and careful work in the hot-houses of the 'Jardin des Plantes,' and in front of the old bric-a-brac dealer's stalls, which used to stand about the entrance to the Louvre. And how admirably, with the help of these slowly and scrupulously finished studies, he could repro-

duce, in an ornamental letter or floral ornament, a lily broken by the storm, or a sheaf of Indian arms and musical instruments."

In 1836, his "Chess Players," two men watching intently the moves of chess, and "The Little Messenger," attracted a crowd of admirers. Each sold for twenty dollars. He had now struggled for six years in Paris. It was high time that his unremitting and patient work should find approval. The people were amazed at so vast an amount of labor in so small a space. They looked with their magnifying glasses, and found the work exquisite in detail. They had been accustomed to great canvases, glowing colors, and heroic or romantic sentiments; but here there was wonderful workmanship.

When the people began to admire, critics began to criticize. They said "Meissonier can depict homelike or ordinary scenes, but not historic." He said nothing, but soon brought out "Diderot" among the philosophers, Grimm, D'Alembert, Baron Holbach, and others in the seventeenth century. Then they said, he could draw interiors only, and "on a canvas not much larger than his thumb-nail." He soon produced the "Portrait of the Sergeant," "one of the most daring experiments in the painting of light, in modern art. The man stands out there in the open by himself, literally bathed in light, and he makes a perfect picture." Then they were sure that he could not paint movement. He replied by painting "Rixe," two ruffians who are striving to fight, but are withheld by friends. This was given by Louis Napoleon to the Prince Consort.

Meissonier also showed that he could depict grand scenes, by "Moreau and Dessoles on the eve of the battle of Hohenlinden," the "Retreat from Russia," and the "Emperor at Solferino." Into these he put his admiration for Napoleon the Great, and his adoration for his

defeated country. In the former picture, the two generals are standing on a precipice, surveying the snow-covered battle-field with a glass; the trees are bending under a strong wind, and the cloaks of the generals are fluttering behind them. One feels the power of this picture.

In painting the "Retreat from Russia," the artist borrowed the identical coat worn by Napoleon, and had it copied, crease for crease, and button for button. "When I painted that picture," he said, "I executed a great portion of it out of doors. It was midwinter, and the ground was covered with snow. Sometimes I sat at my easel for five or six hours together, endeavoring to seize the exact aspect of the winter atmosphere. My servant placed a hot foot-stove under my feet, which he renewed from time to time, but I used to get half-frozen and terribly tired."

He had a wooden horse made in imitation of the white charger of the Emperor; and seating himself on this, he studied his own figure in a mirror. His studies for this picture were almost numberless,—a horse's head, an up-lifted leg, cuirasses, helmets, models of horses in red wax, etc. He also prepared a miniature landscape, strewn with white powder resembling snow, with models of heavy wheels running through it, that he might study the furrow made in that terrible march home from burning Moscow. All this was work,—hard, patient, exacting work.

It had now become evident to the world, and to the critics as well, that Meissonier was a master; that he was not confined to small canvases nor home scenes.

In 1855 he received the grand medal; in 1856 he was made an officer of the Legion of Honor; in 1861, a member of the Institute; and in 1867, at the International Exhibition, he received the grand medal again. When the

prizes were given by the Emperor, the "Battle of Solferino" was placed in the center of the space cleared for the ceremony, with the works of Reimers, the Russian painter, Knaus of Prussia, Rousseau, the French landscape-painter, and others. This painting represents Napoleon III. in front of his staff, looking upon the battle "as a cool player studies a chess-board. On the right, in the foreground, some artillery-men are manœuvring their guns. The corpses of a French soldier and two white Austrians, torn to rags by some explosion, show where the battle had passed by."

Meissonier's paintings now brought enormous prices. His "Marshal Saxe and his Staff" brought eight thousand six hundred dollars in New York; the "Soldiers at Cards," in 1876, in the same city, eleven thousand five hundred dollars; in 1867, his "Cavalry Charge" was sold to Mr. Probasco of Cincinnati, for thirty thousand dollars; and the "Battle of Friedland," upon which he is said to have worked fifteen years to A. T. Stewart, of New York, for sixty thousand dollars. Every figure in this was drawn from life, and the horses moulded in wax. It represents Napoleon on horseback, on a slight elevation, his marshals grouped around him, holding aloft his cocked hat in salutation, as the soldiers pass hurriedly before him.

Edmund About once wrote, "To cover M. Meissonier's pictures with gold pieces simply would be to buy them for nothing; and the practice has now been established of covering them with bank notes."

"The Blacksmith," shoeing a patient old carthorse, perfect in anatomy; "La Halte," some soldiers at an inn, now in Hertford House gallery; and "La Barricade," a souvenir of the civil war, are among the favorite pictures of this famous man. And yet as one looks at some of the exquisite work about a convivial scene, the words of

the great Boston painter, William Hunt, come to mind. Being shown a picture, very fine in technique, by a Munich artist, of a drunken man, holding a half-filled glass of wine, he said, "It's skilfully done, but *what is the use of doing it!* The subject isn't worthy of the painter."

- Rarely does a woman appear in Meissonier's pictures.
-) He has done nothing to deprave morals, which is more than can be said of some French art. His portrait of Madame Henri Thénard was greatly admired, while that of Mrs. Mackay was not satisfactory, and was said to have been destroyed by her. Few persons, however, can afford to destroy a Meissonier. When told once that "he was a fortunate man, as he could possess as many Meissoniers as he pleased," he replied, "No, no, I cannot; that would ruin me. They are a great deal too dear."

He lived in the Boulevard Malesherbes, near the lovely Parc Monceau, in the heart of the artists' quarter in Paris. His handsome home, designed by himself in every detail, was in the Italian Renaissance style. He had two studies,—one a quiet nook, where he could escape interruptions; and one very large, where were gathered masterpieces from every part of the world. Here were "a courtyard of the time of Louis XIII., brilliantly crowded with figures in gala dress; a bride of the same period, stepping into an elegant carriage of a crimson color, for which Meissonier had a miniature model built by a coachmaker, to study from; a superb work of Titian,—a figure of an Italian woman in a robe of green velvet, the classic outline of her head shown against a crimson velvet curtain in the background; a sketch of Bonaparte on horseback, at the head of his picturesquely dressed staff, reviewing the young conscripts of the army of Italy, who are cheering as he passes;" and many more valuable

pictures. Here, too, were bridles of black leather, with silver ornaments, once the property of Murat.

One picture here, of especial interest, was painted at his summer home at Poissy, when his house was crowded with German soldiers in the war of 1871. "To escape their company," says M. Claretie, "in the rage that he experienced at the national defeat, he shut himself up in his studio, and threw upon the canvas the most striking, the most vivid, the most avenging of allegories: he painted Paris, enveloped in a veil of mourning, defending herself against the enemy, with her soldiers and her dying grouped round a tattered flag; sailors, officers, and fusiliers, soldiers, national guards, suffering women, and dying children; and, hovering in the air about them, with the Prussian eagle by her side, was Famine, wan and haggard Famine, accomplishing the work that the bombardment had failed to achieve."

His summer home, like the one in Paris, was fitted up luxuriously. He designed most of the furniture and the silver service for his table. Flowers, especially geraniums and tea roses, blossomed in profusion about the grounds, while great trees and fountains made it a restful and inviting place.

Near by were his well-filled stables, his favorite horse, Rivoli, being often used for his model. He was equally fond of dogs, and had several expensive hounds. How strange all this, compared with those early days of pinching poverty! He was rarely seen in public, because he learned—what, alas! some people learn too late in life—that there could be no success, if one's time were frittered away. His friend, Claretie, said of him, "This man, who lives in a palace is as moderate as a soldier on the march. This artist, whose canvases are valued by the half-million, is as generous as a nabob. He will give to a charity sale a picture worth the price of a house.

Praised as he is by all, he has less conceit in his nature than a wholesale painter."

On January 31, 1891, at his home in Paris, the great artist passed away. His illness was very brief. The funeral services took place at the Church of the Madeleine, which was thronged with the leaders of art and letters. An imposing military cortege accompanied the body to its last resting-place at Poissy, the summer home of the artist, on the Seine, ten miles from Versailles.

HORACE GREELEY

AMONG the hills of New Hampshire, in a lonely, unpainted house, Horace Greeley was born, Feb. 3, 1811, the third of seven children. His father was a plain farmer, hard-working, yet not very successful, but aided by a wife of uncommon energy and good spirits, notwithstanding her many cares. Besides her housework, and spinning, and making the children's clothes, she hoed in the garden, raked and loaded hay to help her husband, laughing and singing all day long, and telling her feeble little son, Horace, stories and legends all the evening. Her first two children having died, this boy was especially dear. Mrs. Greeley, was a great reader of such books as she could obtain, and remembered all she read. It requires no great discernment to see from whence Horace Greeley derived his intense love for reading, and his boundless energy.

He learned to read, one can scarcely tell how. When two years old, he would pore over the Bible, as he lay on the floor, and ask questions about the letters; at three, he went to the "district school," often carried through the deep snow on the shoulders of one of his aunts, or on the back of an older boy. He soon stood at the head of his little class in spelling and reading, "and took it so much to heart when he did happen to lose his place, that he would cry bitterly; so that some boys, when they had gained the right to get above him, declined the honor, because it hurt Horace's feelings so."

Before he was six years old he had read the Bible

through, and "Pilgrim's Progress." Their home contained only about twenty books, and these he read and re-read. As he grew older, every book within seven miles was borrowed, and perused after the hard day's work of farming was over. He gathered a stock of pine knots, and, lighting one each night, lay down by the hearth, and read, oblivious to all around him. The neighbors came and made their friendly visits, and ate apples and drank cider, as was the fashion, but the lad never noticed their coming or their going. When really forced to leave his precious books for bed, he would repeat the information he had learned, or the lessons for the next day, to his brother, who usually, most ungraciously, fell asleep before the conversation was half completed.

When Horace was nearly ten years old, his father, who had speculated in a small way in lumber, became a bankrupt; his house and furniture were sold by the sheriff, and he was obliged to flee from the State to avoid arrest. Some of these debts were paid, thirty years afterward, by his noble son. Going to Westhaven, Vt., Mr. Greeley obtained work on a farm, and moved his family thither. They were very poor, the children sitting on the floor and eating their porridge together out of a tin pan; but they were happy in the midst of their hard work and plain food. The father and the boys chopped logs, and the little sisters, with the mother, gathered them in heaps, the voice of the latter, says Mr. James Parton, in his biography, "ringing out in laughter from the tangled brushwood in which she was often buried." Would there were thousands more of such women, who can laugh at disaster, and keep their children and themselves from getting soured with life. Everybody has troubles; and very wise are they who do not tell them, either in their faces or by their words.

Horace earned a few pennies all his own; sometimes by selling nuts, or bundles of the roots of pitch-pine for kindling, which he carried on his back to the store. This money he spent in books, buying Mrs. Hemans's poetry and "Shakespeare." No wonder that the minister of the town said, "Mark my words; that boy was not made for nothing."

He could go to school no longer, and must now support himself. From earliest childhood he had determined to be a printer; so, when eleven years of age, he walked nine miles to see the publisher of a newspaper, and obtain a situation. The editor looked at the small, tow-haired boy, shook his head, and said, "You are too young." With a heavy heart the child walked the long nine miles back again. But he must do something; and, a little later, with seventy-five cents in his pocket, and some food tied in a bundle, which he hung on the end of a stick, slung over his shoulder, he walked one hundred and twenty miles back to New Hampshire, to see his relatives. After some weeks he returned, with a few more cents in his purse than when he started!

The father Greeley ought to have foreseen that such energy and will would produce results; but because Horace, in a fit of abstraction, tried to yoke the "off" ox on the "near" side, he said, "Ah! that boy will never get along in the world. He'll never know more than enough to come in when it rains." Alas! for the blindness of Zaccheus Greeley, whose name even would not be remembered but for his illustrious son.

When Horace was fourteen, he read in a newspaper that an apprentice was wanted in a printing-office eleven miles distant. He hastened thither, and, though unprepossessing, from his thin voice, short pantaloons, lack of stockings, and worn hat, he was hired on trial. The first day he worked at the types in silence. Finally the

boys began to tease him with saucy remarks, and threw type at him; but he paid no attention. On the third day, one of the apprentices took a large black ball, used to put ink on the type, and remarking that Horace's hair was too light, daubed his head four times. The pressman and editor both stopped their labors to witness a fight; but they were disappointed, for the boy never turned from his work. He soon left his desk, spent an hour in washing the ink from his hair, and returned to his duties. Seeing that he could not be irritated, and that he was determined to work, he became a great favorite.

When at his type, he would often compose paragraphs for the paper, setting up the words without writing them out. He soon joined a debating society, composed of the best-informed persons of the little town of East Poughkeepsie,—the minister, the doctor, the lawyer, the schoolteachers, and the like. What was their surprise to find that the young printer knew almost everything, and was always ready to speak, or read an essay.

He was often laughed at because of his poor clothes, and pitied because, slender and pale as he was, he never wore an overcoat; but he used to say, "I guess I'd better wear my old clothes than run in debt for new ones." Ah! they did not know that every penny was saved and sent to the father, struggling to clear a farm in the wilderness in Pennsylvania. During his four years' apprenticeship he visited his parents twice, though six hundred miles distant, and walked most of the way.

Soon after he had learned his trade, the newspaper suspended, and he was thrown out of work. The people with whom he boarded gave him a brown overcoat, not new, and with moistened eyes said good-bye to the poor youth whom they had learned to love as their own. He remained a few weeks with his family, then walked fifty miles east to a town in New York State, where he found

plenty of work, but no money, and in six weeks returned to the log-cabin. After trying various towns, he found a situation in Erie, taking the place of a workman who was ill, and for seven months he did not lose a day. Out of his wages—eighty-four dollars—he had used only six, less than one dollar a month! Putting fifteen dollars in his pocket, he took the balance of sixty-three in a note, and gave it to his father. A noble son indeed, who would not buy a single garment for himself, but carried the money home, so as to make the poor ones a trifle more comfortable!

He had become tired of working in the small towns; he determined to go to the great city of New York, and “be somebody.” He walked a part of the way by the tow-path along the canal, and sometimes rode in a scow. Finally, at sunrise, Friday, Aug. 18, 1831, he landed close to the Battery, with ten dollars in his pocket, knowing, he says, “no human being within two hundred miles.” His first need was a boarding-place. Over a saloon, kept by an Irishman, he found room and board for two dollars and a half a week. Fortunately, though it was the almost universal custom to use liquors, Horace was a teetotaler, and despised chewing or smoking tobacco, which he regarded “as the vilest, most detestable abuse of his corrupted sensual appetites whereof depraved man is capable”; therefore he had no fear of temptation from these sources.

All day Friday and Saturday he walked the streets of New York, looking for work. The editor of the *Journal of Commerce* told him plainly that he was a runaway apprentice from the country, and he did not want him. “I returned to my lodging on Saturday evening, thoroughly weary, disheartened, disgusted with New York, and resolved to shake its dust from my feet next Monday morning, while I could still leave with

money in my pocket, and before its almshouse could foreclose upon me." On Sunday he went to church, both morning and afternoon. Late in the day, a friend who called upon the owner of the house, learning that the printer wanted work, said he had heard of a vacancy at Mr. West's, 85 Chatham Street.

The next morning Horace was at the shop at half-past five! New York was scarcely awake; even the newsboys were asleep in front of the paper offices. He waited for an hour and a half,—a day, it seemed to him,—when one of the journey-men arrived, and, finding the door locked, sat down beside the stranger. He, too, was a Vermonter, and he determined to help young Greeley, if possible. He took him to the foreman, who decided to try him on a Polygot Testament, with marginal references, such close work that most of the men refused to do it. Mr. West came an hour or two later, and said, in anger, "Did you hire that fool?"

"Yes; we need help, and he was the best I could get," said the foreman.

"Well, pay him off to-night, and let him go about his business."

When night came, however, the country youth had done more and better work, than anybody who had tried the Testament. By beginning his labors before six in the morning, and not leaving his desk till nine in the evening, working by the light of a candle stuck in a bottle, he could earn six dollars a week. At first his fellow-workmen called him "the ghost," from his white hair and complexion; but they soon found him friendly, and willing to lend money, which, as a rule, was never returned to him; they therefore voted him to be a great addition to the shop. As usual, though always scrupulously clean, he wore his poor clothes, no stockings, and his wristbands tied together with twine. Once he bought

a second-hand black suit of a Jew, for five dollars, but it proved a bad bargain. His earnings were sent, as before, to his parents.

After a year, business grew dull, and he was without a place. For some months he worked on various papers, when a printer friend, Mr. Story, suggested that they start in business, their combined capital being one hundred and fifty dollars. They did so, and their first work was the printing of a penny *Morning Post*, which suspended in three weeks, they losing sixty dollars. The partner was drowned shortly after, and his brother-in-law took his place.

Young Greeley, now twenty-three and deeply interested in politics, determined to start a weekly paper. Fifteen of his friends promised to subscribe for it. The *New Yorker* was begun, and so well conducted was it that three hundred papers throughout the country gave it complimentary notices. It grew to a subscription list of nine thousand persons; but much of the business was done on trust, times were hard, and, after seven years, the enterprise had to be abandoned. This was a severe trial to the hard-working printer, who had known nothing but struggles all his life. Years after this he wrote, "Through most of this time I was very poor, and for four years really bankrupt, though always paying my notes, and keeping my word, but living as poorly as possible. My embarrassments were sometimes dreadful; not that I feared destitution, but the fear of involving my friends in my misfortunes was very bitter. . . . I would rather be a convict in a State prison, a slave in a rice-swamp, than to pass through life under the harrow of debt. Hunger, cold, rags, hard work, contempt, suspicion, unjust reproach, are disagreeable, but debt is infinitely worse than them all. Avoid pecuniary obligation as you would pestilence or famine. If you have

but fifty cents, and can get no more for a week, buy a peck of corn, parch it, and live on it, rather than owe any man a dollar."

Meantime the young editor had married Miss Mary Y. Cheney, a schoolteacher of unusual mind and strength of character. It was, of course, a comfort to have some one to share his sorrows; but it pained his tender heart to make another help bear his burdens. Beside editing the *New Yorker*, he had also taken charge of the *Jeffersonian*, a weekly campaign paper published at Albany, and the *Log-Cabin*, established to aid in the election of General Harrison to the Presidency. The latter paper was a great success, the circulation running up to ninety thousand, though very little money was made; but it gave Mr. Greeley a reputation in all parts of the country for journalistic ability.

President Harrison died after having been a month in office; and seven days after his death, Mr. Greeley started, April 10, 1841, a new paper, the *New York Tribune*, with the dying words of Harrison as his motto: "I desire you to understand the true principles of the government. I wish them carried out. I ask nothing more." The paper had scarcely any money for its foundation—only a thousand dollars loaned by a friend—but it had a *true man* at its head, strong in his hatred of slavery, and the oppression of the laboring man, and fearless in the advocacy of what he believed to be right.

Success did not come at first. Of the five thousand copies published and to be sold at a cent each, Mr. Greeley says, "We found some difficulty in giving them away." The expenses for the first week were five hundred and twenty-five dollars; receipts, ninety-two. But the boy who could walk nearly six hundred miles to see his parents, and be laughed at for poor clothes, while he saved his money for their use, was not to be overcome

at thirty years of age, by the failure of one or of a dozen papers. Some of the New York journals fought the new sheet; but it lived and grew till, on the seventh week, it had eleven thousand subscribers. A good business-manager was obtained as partner. Mr. Greeley worked sixteen hours a day. He wrote four columns of editorial matter (his copy, wittily says Junius Henri Browne, "strangers mistook for diagrams of Boston"), dozens of letters, often forgot whether he had been to his meals, and was ready to see and advise with everybody. When told that he was losing time by thus seeing people, he said, "I know it; but I'd rather be beset by loafers, and stopped in my work, than be cooped up where I couldn't be got at by men who really wanted to and had a right to see me." So warm as this were his sympathies with all humanity!

In 1842, when he was thirty-one, he visited Washington, Niagara, and his parents in Pennsylvania, and wrote delightful letters back to his paper. How proud the mother must have felt of the growing fame of her son! What did Zaccheus think now of his boy of whom he prophesied that he "would never know more than enough to come in when it rains"?

The years passed on. Margaret Fuller came upon the editorial staff; for Mr. Greeley was ever the advocate of the fullest liberty for woman in any profession, and as much pay for her work as for that of men. And now came a great sorrow, harder to bear than poverty. His little son Pickie, called "the glorious boy with radiant beauty never equalled," died suddenly. "When at length," he said, "the struggle ended with his last breath, and even his mother was convinced that his eyes would never again open upon the scenes of this world, I knew that the summer of my life was over; that the chill breath of its autumn was at hand; and that my future course

must be along the down-hill of life." He wrote to Margaret Fuller in Italy, "Ah, Margaret, the world grows dark with us! You grieve, for Rome is fallen; I mourn, for Pickie is dead." His hopes were centered in this child; and his great heart never regained its full cheerfulness.

In 1848 he was elected to Congress for three months to fill out the unexpired term of a deceased member, and did most effective work with regard to the mileage system and the use of the public lands. To a high position had come the printer-boy. At this time he was also prominently in the lecture-field, speaking twice a week to large audiences all over the country. In 1850 his first book was published by the Harpers, "Hints toward Reform," composed of ten lectures and twenty essays. The following year he visited England as one of the "jury" in the awarding of prizes; and while there made a close study of philanthropic and social questions. He always said, "He, who by voice or pen strikes his best blow at the impostures or vices whereby our race is debased and paralyzed, may close his eyes in death, consoled and cheered by the reflection that he has done what he could for the emancipation and elevation of his kind."

In 1855 he again visited Europe; and four years later, California, where he was received with great demonstrations of honor and respect. In 1860 he was at the Chicago Convention, and helped to nominate Abraham Lincoln in preference to William H. Seward. Mr. Greeley had now become one of the leading men of the nation. His paper molded the opinions of hundreds of thousands. He had fought against slavery with all the strength of his able pen; but he advocated buying the slaves for four hundred million dollars rather than going to war,—a cheaper method than our subsequent conflict,

with enormous loss of life and money. When he found the war inevitable, after General McClellan's defeat at the Chickahominy, he urged upon Mr. Lincoln immediate emancipation, which was soon adopted. The *New York World* said after his death, "Mr. Greeley will hold the first place with posterity on the roll of emancipation."

In the draft riots in New York, in 1863, the mob burst into the Tribune Building, smashing the furniture, and shouting, "Down with the old white coat!" Mr. Greeley always wore a coat and hat of this hue. Had he been present, doubtless he would have been killed at once. When urged to arm the office, he said, "No; all my life I have worked for the working-men; if they would now burn my office and hang me, why, let them do it."

The same year he began his "History of the Civil War" for a Hartford publisher. Because so constantly interrupted, he went to the Bible House, and worked with an amanuensis from nine in the morning till four in the afternoon, and then to the *Tribune* office, and wrote on his paper till eleven at night. These volumes, dedicated to John Bright, have had a sale of several hundred thousand copies.

After the war Mr. Greeley, while advocating "impartial suffrage" for black as well as white, advocated also "universal amnesty." He believed nothing was to be gained by punishing a defeated portion of our nation, and wanted the past buried as quickly as possible. He was opposed to the hanging of Jefferson Davis; and with Gerritt Smith, a well-known abolitionist, and about twenty others, he signed Mr. Davis's bail-bond for one hundred thousand dollars, which released him from prison at Fortress Monroe, where he had been for two years. At once the North was aflame with indignation. No criticism was too scathing; but Mr. Greeley took

the denunciations like a hero, because he had done what his conscience approved. He said, "Seeing how passion cools and wrath abates, I confidently look forward to the time when thousands who have cursed will thank me for what I have done and dared in resistance to their own sanguinary impulses. . . . Out of a life earnestly devoted to the good of human kind, your children will select my going to Richmond and signing that bail-bond as the wisest act."

In 1872 considerable disaffection having arisen in the Republican party at the course pursued by President Grant at the South, the "Liberal Republicans," headed by Sumner, Schurz, and Trumbull, held a convention at Cincinnati and nominated Horace Greeley for President. The Democratic party saw the hopelessness of nominating a man in opposition to Grant and Greeley, and accepted the latter as their own candidate. The contest was bitter and partisan in the extreme. Mr. Greeley received nearly three million votes, while General Grant received a half million majority.

No doubt the defeat was a great disappointment to one who had served his country and the Republican party for so many years with very little political reward. But just a month before the election came the crushing blow of his life, in the death of his noble wife. He left his speech-making, and for weeks attended her with the deepest devotion. A few days before she died, he said, "I am a broken down old man. I have not slept one hour in twenty-four for a month. If she lasts, poor soul, another week, I shall go before her."

After her death he could not sleep at all, and brain-fever soon set in. Friday, Nov. 29, the end came. At noon he said distinctly, his only remaining children, Ida and Gabriella, standing by his bedside, "I know that my Redeemer liveth"; and at half-past three, "It is done."

He was ready for the great change. He had written only a short time before, "With an awe that is not fear, and a consciousness of demerit which does not exclude hope, I await the opening, before my steps, of the gates of the eternal world." Dead at sixty-one! Overworked, not having had "a good night's sleep in fifteen years!"

When his death became known, the whole nation mourned for him. Newspapers from Maine to Louisiana gave touching tributes to his greatness, his purity, and his far-sightedness as a leader of the people. The Union League Club, the Lotos, the Typographical Society, the Associated Press, German and colored clubs, and temperance organizations passed resolutions of sorrow. Cornell University, of whose Board he was a member, did him honor. St. Louis, Albany, Indianapolis, Nashville, and other cities held memorial meetings. John Bright sent regrets over "our friend, Horace Greeley." Congress passed resolutions of respect for his "eminent services and personal purity and worth."

The following Sabbath clergymen all over the country preached about this wonderful life: its struggles succeeded by world-wide honor. Mr. Greeley's one great wish was gratified, "I cherish the hope that the journal I projected and established will live and flourish long after I shall have mouldered into forgotten dust; and that the stone which covers my ashes may bear to future eyes the still intelligible inscription, 'Founder of the NEW YORK TRIBUNE.'"

SIR HENRY BESSEMER

A LITTLE way from London, England, at Denmark Hill, looking toward the Crystal Palace, is a mansion which is fit for royalty. The grounds, covering from thirty to forty acres, are beautifully terraced, dotted here and there with lakelets, fountains, and artificial caverns, while the great clumps of red rhododendron, yellow laburnum, pink hawthorne, and white laurel make an exquisitely colored picture. The house itself is spacious and inviting, with its elegant conservatory and rare works of art. The famous master of this house, Sir Henry Bessemer, was cordial and gracious; and from his genial face and manner, no one would have imagined that his life had been one long struggle with obstacles.

Born in Charlton, a little country town in Hertfordshire, Jan. 19, 1813, he received the rudiments of an education like other boys in the neighborhood. His father, Anthony Bessemer, an inventor, seeing that his son was inclined to mechanics, bought him, in London, a five-inch foot-lathe and a book which described the art of turning. Day after day, in the quiet of his country home, he studied and practised turning, and modelling in clay.

At eighteen years of age he went to London, "knowing no one," he says, "and myself unknown,—a mere cipher in a vast sea of human enterprise." He soon found a place to work as modeller and designer, engraving a large number of original designs on steel, with a diamond point, for patent-medicine labels. A year later he

exhibited one of his models at the Royal Academy. His inventive brain and observing eye were always alert in some new direction. Having ascertained that the Government lost thousands of pounds annually by the transfer of adhesive stamps from old deeds to new ones, he determined to devise a stamp which could not be used twice.

For several months he worked earnestly, at night after his daily tasks were over, and in secret, thinking how richly the Government would reward him if he succeeded. At last he produced a die of unique design, which perforated a parchment deed with four hundred little holes. He hastened to the Stamp officials to show his work. They were greatly pleased, and asked him which he preferred for his reward, a sum of money, or the position of Superintendent of Stamps, with a salary of three or four thousand dollars a year. He delightedly chose the latter, as that would make him comfortable for life. There was another reason for his delight; for being engaged to be married, he would have no solicitude now about daily needs: life would flow on as smoothly as a river.

At once he visited the young lady, and told her of his great success. She listened eagerly, and then said, "Yes, I understand this; but surely, if all stamps had a *date* put upon them, they could not at a future time be used without detection." His spirits fell. He confessed afterward that, "while he felt pleased and proud of the clever and simple suggestion of the young lady, he saw also that all his more elaborate system, the result of months of toil, was shattered to pieces by it." What need for four hundred holes in a die, when a single date was more effective? He soon worked out a die with movable dates, and with frankness and honor presented it before the Government officials. They saw its

preferableness: the new plan was adopted by Act of Parliament; the old stamps were called in and new ones issued; and then the young inventor was informed that his services as Superintendent of Stamps, at three thousand dollars a year, were not needed.

But surely the Government, which was to save a half million dollars a year, would repay him for his months of labor and thought! Associations, like individuals, are very apt to forget favors, when once the desired end is attained. The Premier had resigned; and, after various promises and excuses, a lawyer in the Stamp Office informed him that he made the new stamp of his own free will, and there was no money to be given him. "Sad and dispirited, and with a burning sense of injustice over-powering all other feelings," says young Bessemer, "I went my way from the Stamp Office, too proud to ask as a favor that which was indubitably my right."

Alas! that he must learn thus early the selfishness of the world! But he took courage; for, had he not made one real invention? and it must be in his power to make others. When he was twenty-five he produced a type-casting machine; but so opposed was it by the compositors, that it was finally abandoned. He also invented a machine for making figured Utrecht velvet; and some of his productions were used in the state apartments of Windsor Castle.

A little later his attention was accidentally called to bronze powder, he having bought a small portion to ornament his sister's album. The powder, made in Germany, cost only twenty-two cents a pound in the raw material, and sold for twenty-two dollars. Here was a wonderful profit. Why could he not discover the process of making it? He worked for eighteen months, trying all sorts of experiments, and failed. But failure to a great mind never really means failure; so, after



SIR HENRY BESSEMER.



six months, he tried again, and—succeeded. He knew little about patents, had been recently defrauded by the Government; and he determined that this discovery should be kept a secret. He made a small apparatus, and worked it himself, sending out a travelling-man with the product. That which cost him less than one dollar was sold for eighteen. A fortune seemed now really within his grasp.

A friend, assured of his success, put fifty thousand dollars into the business. Immediately Bessemer made plans of all the machinery required, sent various parts to as many different establishments, lest his secret be found out, and then put the pieces of his self-acting machines together. Five assistants were engaged at high wages, under pledge of secrecy. At first he made one thousand per cent profit; and even, in the later years, the profit was three hundred per cent. Three of the assistants died; and Mr. Bessemer turned over the business and the factory to the other two. The secret of making the bronze powder was never told. Even Mr. Bessemer's oldest son reached manhood before he ever entered the locked room where it was made.

For ten years the inventor now turned his attention to the construction of railway carriages, centrifugal pumps, etc. His busy brain could not rest. When frequent explosions in coal-mines occasioned discussion throughout the country, he made, at large expense, a working model for ventilating mines, and offered to explain it to a committee of the House of Commons. His offer was declined with thanks. A little investigation on the part of great statesmen would have been scarcely out of place.

At the great exhibition in London in 1851, he exhibited several machines,—one for grinding and polishing plate glass, and another for draining, in an hour, an

acre of land covered with water a foot deep. The crowd looked at them, called the inventor "the ingenious Mr. Bessemer," and passed on. Two years later he made some improvements in war implements, and submitted his plans to the Woolwich Arsenal; but they were declined, without thanks even. Some other men might have become discouraged; but Mr. Bessemer knew that obstacles only strengthen and develop men.

The improved ordnance having been brought to the knowledge of Napoleon III., he encouraged the inventor, and furnished the money to carry forward the experiments. While the guns were being tested at Vincennes, an officer remarked, "If you cannot get stronger metal for your guns, such heavy projectiles will be of little use." And then Mr. Bessemer began to ask himself if he could not improve iron. But he had never studied metallurgy. This, however, did not deter him; for he immediately obtained the best books on the subject, and visited the iron-making districts. Then he bought an old factory at Baxter House, where Richard Baxter used to live, and began to experiment for himself. After a whole year of labor he succeeded in greatly improving cast-iron, making it almost as white as steel.

Could he not improve steel also? For eighteen months he built and pulled down one furnace after another, at great expense. At last "the idea struck him," he says, of making cast-iron malleable by forcing air into the metal when in a fluid state, cast-iron being a combination of iron and carbon. When oxygen is forced in, it unites with the carbon, and thus the iron is left nearly pure. The experiment was tried at the factory, in the midst of much trepidation, as the union of the compressed air and the melted iron produced an eruption like a volcano; but when the combustion was over, the result was steel.

Astonished and delighted, after two years and a half

of labor, Bessemer at once took out a patent; and the following week, by request, Aug. 11, 1856, read a paper before the British Association, on "The manufacture of malleable iron and steel without fuel." There was great ridicule made beforehand. Said one leading steel-maker to another, "I want you to go with me this morning. There is a fellow who has come down from London to read a paper on making steel from cast-iron without fuel! Ha! ha! ha!"

The paper was published in the *Times*, and created a great sensation. Crowds hastened to Baxter House to see the wonderful process. In three weeks Mr. Bessemer had sold one hundred thousand dollars worth of licenses to make steel by the new and rapid method. Fame, as well as great wealth, seemed now assured, when lo! in two months, it being found that only certain kinds of iron could be worked, the newspapers began to ridicule the new invention, and scientists and business men declared the method visionary, and worse than useless.

Mr. Bessemer collected a full portfolio of these scathing criticisms; but he was not the man to be disconcerted or cast down. Again he began the labor of experimenting, and found that phosphorus in the iron was the real cause of the failure. For three long years he pursued his investigations. His best friends tried to make him desist from what the world had proved to be an impracticable thing. Sometimes he almost distrusted himself, and thought he would give up trying, and then the old desire came back more strongly than ever. At last, success was really assured, but nobody would believe it. Every one said, "Oh, this is the thing which made such a blaze two or three years ago, and which was a failure."

Mr. Bessemer took several hundredweight of the new steel to some Manchester friends, that their workmen

might try it, without knowing from whence it came. They detected no difference between this which cost thirty dollars a ton, and what they were then using at three hundred dollars a ton.

But nobody wanted to buy the new steel. Two years went by in this fruitless urging for somebody to take up the manufacture of the new metal. Finally, Bessemer induced a friend to unite with him, and they erected works, and began to make steel. At first the dealers would buy only twenty or thirty pounds; then the demand steadily increased. At last the large manufacturers awoke to the fact that Bessemer was underselling them by one hundred dollars a ton, and they hastened to pay a royalty for making steel by the new process.

But all obstacles were not yet overcome. The Government refused to make steel guns; the ship-builders were afraid to touch it; and when the engineer of the London and North-western Railway was asked to use steel rails, he exclaimed, excitedly, "Mr. Bessemer, do you wish to see me tried for manslaughter?" Now, steel rails are used the world over, at the same cost as iron formerly, and are said to last twenty times as long as iron rails.

Prejudice at last wore away, and in 1866, the "Bessemer process," the conversion of crude iron into steel by forcing cold air through it for fifteen or twenty minutes, was bringing to its inventor an income of five hundred thousand dollars a year! Fame had now come, as well as wealth. In 1874, he was made President of the Iron and Steel Institute, to succeed the Duke of Devonshire. The Institute of Civil Engineers gave him the Telford Gold Medal; the Society of Arts, the Albert Gold Medal. Sweden made him honorary member of her Iron Board; Hamburg gave him the freedom of the city; and the Emperor of Austria conferred upon him the honor of Knight Commander of the Order of Francis Joseph,

sending him a complimentary letter in connection with the jewelled cross and circular collar of the order. Napoleon III. wished to give him the Grand Cross of the Legion of Honor, but the English Government would not permit him to wear it; the Emperor therefore presented him in person with a gold medal weighing twelve ounces. Berlin and the King of Wurtemberg sent him gold medals. In 1879 he was made Fellow of the Royal Society, and the same year was knighted by Queen Victoria. In 1880 the freedom of the city of London was presented to him in a gold casket; the only other great discoverers who have received this distinction being Dr. Jenner, who introduced vaccination, and Sir Rowland Hill, the author of penny postage. In the United States, which gives no ribbons or decorations, Indiana has appropriately named a flourishing town after him.

It is estimated that Sir Henry Bessemer's one discovery of making steel saved the world, in twenty years, above five thousand million dollars.

When his patent expired in 1870, he had received in royalties over five million dollars. In his steel works at Sheffield, after buying in all the licenses sold in 1856, when the new process seemed a failure, the profits every two months equalled the original capital, or in fourteen years the company increased the original capital eighty-one times by the profits.

How wise it proved that the country lad did not obtain the permanent position of superintendent of stamps, at three thousand dollars a year!

Rich beyond his highest hopes, the friend of such eminent and progressive men as the King of the Belgians, and famous scientists, Sir Henry did not cease experimenting. Knowing the terrors of sea-

sickness, he designed a great swinging saloon, seventy feet by thirty, in the midst of a sea-going vessel named the "Bessemer." The experiment cost one hundred thousand dollars, but did not prove successful. In 1877, when sixty-four years old, he began to devote himself to the study of Herschel's works on optics, and later constructed an immense and novel telescope, which magnifies five thousand times. The instrument is placed in a comfortable observatory, so that the investigator can either sit or stand while making his observations. "The observing room, with its floor, windows, and dome, revolve and keep pace automatically with every motion of the telescope." This is accomplished by hydraulic power.

No wonder that Bessemer was called the "great captain of modern civilization." He revolutionized one of the most important of the world's industries; he fought obstacles at every step,—poverty, the ridicule of the press, the indifference of his countrymen, and the cupidity of men who would steal his inventions or appropriate the results. He earned leisure, but he rarely took it. His was a life of labor, prosecuted with indomitable will and energy. He obtained over one hundred and twenty patents, for which the specifications and drawings fill seven large volumes, all made by himself. The world at last came to know and honor the boy who came to London at the age of eighteen, "a mere cipher in a vast sea of human enterprise." He made his way to greatness unaided, save by his helpful wife.

Sir Henry died on the fifteenth of March, 1898, leaving an immense fortune, which, nevertheless, was not inordinate when compared with the services rendered by him to mankind; and a stainless name. The unfair treatment which had embittered his earlier days had been atoned for by the Queen granting him a title in recogni-

tion of his invention accepted by the Post-Office, and he had come to be regarded as one of the greatest benefactors of modern times. Such a life, crowned with such a success, is calculated to be a mighty inspiration to every ambitious youth.

ULYSSES S. GRANT

ULYSSES S. GRANT was the son of a well-to-do tanner, Jesse Grant, of Georgetown, Ohio, and traced his ancestry backward through grandfather and great-grandfather of Revolutionary and Colonial war fame respectively to the great clan of Scotland Grants so distinguished throughout the centuries for their "sturdy indomitable traits and prowess in war." From the very first Jesse Grant was absurdly proud of his first born. He talked so continually of "my Ulysses" that his neighbors, who could see nothing at all wonderful about the sturdy, rather sluggish boy, beyond his unusual understanding and skill with horses, were disgusted, and comrades of "'Lyssus" felt called on to pay off the score. They "had it in for him" always, and life was not by any means a bed of roses for the little tanner boy.

Besides the many battles which he was forced to fight for the maintenance of his dignity, he was obliged to put in long hours at the tannery. It was his business to break bark for the hopper of the bark-mill,—an occupation severely trying to a boy's soul especially when papaws were ripe and fishing was prime. Young 'Lyssus hated the tanner shed prison-house with all his Grant vim, and escaped whenever it was possible to do so by honorable means. He was too loyal to the firm principles of his mother, and too much in awe of his father's stern but just rule to play truant. He sought diligently for other work that he might hire a boy in his stead. Sometimes, also, he succeeded in persuading his sisters to help him by exalting the privilege, Tom Sawyer fashion,



ULYSSES S. GRANT

and "by earnestly detailing the need there was of his riding the sweep behind the horse!" This was the first outcropping of the great generalship which was to appear in later years.

Young 'Lyssus scored his first strong triumph over apparent insurmountable difficulties when but twelve years of age. His father sent him to the woods after a load of logs, expecting the mill hands to help him make up his load. On arriving at the woods the lad found plenty of logs but no men. He was too impatient to wait, and too self-reliant to seek help. He looked about until he found a fallen tree, one end of which was lying on the stump about the height of his wood cart from the ground. Unhitching his team, he drew his logs one by one up the side of the prostrate tree, until all he wanted were in the right position. Then backing his cart under the load, and again making good use of his team and chain, he was soon able to drive off triumphantly, with no thanks to any one.

On a certain day, some years later, it happened that there was a shortage of hands at the tannery, and Mr. Grant ordered Ulysses to help him in the "beam room." This was the most repulsive place in all the tannery, where the reeking hides were scraped and hung. So far the lad had escaped work there. Now he faced his father bravely. "Father," he said firmly, "You know this tanning business is not to my liking. I'll work at it though, if you say so, until I am twenty-one; but you may depend upon it, I'll never work a day at it after that."

Mr. Grant was very reasonable and judicious in some ways. He saw the folly of training the lad in a business which would never interest him. So he replied at once: "My son, you need never work again in the tannery unless you choose. I want you to work at whatever you

like and intend to follow. What do you wish to be?"

"A farmer, a down-the-river trader, or a college professor."

"H'm!" observed the father, looking keenly at the boy, whom a travelling phrenologist had jokingly said might one day be president of the United States. "The little farm which you have been working is rented out. I have not the capital to set you up on a large scale. I have little respect for the river traders. Besides, I doubt if you have the ability to thrive in competitions of enterprise and greed. Nor do I see how I can send you to school. Times are hard, and an education costs considerable money. How would you like West Point? Education is free there, and the government supports the cadets."

This latter was added merely as a happy afterthought. Though believing firmly in his boy's future greatness, the father had never dreamed of military glory for him. He had not taken into account the blood of fighting ancestors which coursed in his veins, nor the magic in the name "Ulysses," which has ever been linked with strategy and prowess in war.

"Why not?" the lad questioned himself quickly. He had never thought of a military life either, but it offered a release from the tannery and the road to an education, which was then the highest notch in his boyish ambition, and he grasped it eagerly. His appointment came at the age of seventeen, and he was graduated in due time from the famous academy without giving any promise of distinction. Indeed, one of his comrades styled him "a very uncle-like sort of youth, with little enthusiasm in anything." He was modest, good-natured, respectful, companionable, observant, willing, and trusty. No mean list of virtues when weighed calmly! He was, also, proud of his good name and capable of resenting

any insults to his origin or his former occupations. We read in "The Tanner Boy" that he considered the calling of tanner or farmer as honorable as any other in the world, and that he had resolved to "thoroughly tan the hides" of any cadets who showed a disposition to dispute it!

Moreover, U. S. Grant knew no such word as "can't." The story is told that he once laughed at a fellow student who said he could not learn a lesson. "Why, Tom," said he, "there is no such word as can't in the dictionary. I've examined the C's through and through and there is no such word there."

"Well," queried Tom, "what of that?"

"Simply this," answered Grant. "I do not believe in a word that is not in the dictionary. I believe the lesson can be learned, and I am going to try to learn it."

The reply to this was a sneer; for young Grant was not a particularly bright pupil. But he had something more necessary than keen wit and brightness of perception. He had patience and courage and a determination to win. Of course he learned the lesson! When he came to command men, and they hesitated at his orders, or expressed doubts of their ability to comply, he always responded promptly: "The work must be done. There is no such word as can't in the dictionary. Let us try at least."

Grant saw service as first lieutenant, under General Scott, in the Mexican War, where he acquitted himself with credit. At its close he married Miss Julia Dent, of St. Louis, and was assigned to duty in the garrison at Sackett's Harbor. Later, he was transferred to Detroit, and finally ordered to the Pacific Coast, where he rose to the rank of captain. At the age of thirty-two he resigned from the army, and moved his family to a little farm near St. Louis which belonged to his wife. The

next seven years were spent unsuccessfully on the farm, and as a dull clerk in the hide and leather business of his brothers, at Galena, Illinois. The bright hopes which Jesse Grant had early entertained for his son now seemed hopeless, indeed. Ulysses was seemingly dead to all ambition, and utterly discouraged by the plight of hard conditions. "Had he died before the summer of 1861," says Allen, "at the age of forty years, he would have filled an obscure grave, and those to whom he was dearest could not have esteemed his life successful, even in its humble scope. He had not yet found his opportunity; he had not yet found himself."

Lincoln's call for 75,000 troops was to Grant as a magician's wand. For presto! "Useless" Grant was such no longer. He was charged with activity, efficiency, and confidence in his own ability. Five months after leaving the counter at Galena, he electrified Congress and the nation at large by seizing Paducah, at the mouth of the Tennessee, without orders or suggestions from any one. It was the act of a soldier and a statesman; for it not only secured the control of the two great rivers, Ohio and Tennessee, but preserved Kentucky to the Union. Before six months followed, he had captured Fort Donelson and fifteen thousand men. It was the first important success of the war, and turned fortune's tide in favor of the Union. Moreover, it was accomplished without direct orders from his superiors. Indeed, General Halleck, Grant's immediate superior, is said to have considered the feat impossible with such forces as Grant had at his command. Grant was rewarded by being made major-general, and the country rang with cheers; for "Unconditional Surrender" Grant, the new title having come from Grant's curt note in reply to General Buckner's plea for a committee to arrange

terms of capitulation: "No terms except an unconditional and immediate surrender can be accepted. I propose to move immediately upon your works."

Like all men who achieve greatness, General Grant was forced to bear false accusations. Within two weeks after the capture of Fort Donelson, Halleck reported Grant remiss in his duties, and so much addicted to drink that it was unsafe to entrust him with military plans. The charge arose partly from Halleck's dislike of Grant, and partly from false reports which he had received concerning Grant's drinking to excess, and the failure through the treachery of a telegraph operator false to the Union, to forward Grant's reports to Halleck concerning his movements. McClellan, then commander-in-chief, authorized Halleck to place Grant under arrest. For several weeks a cloud hung over him, and his army was sent along the Tennessee under another command. Grant felt the mortification intensely, in spite of the fact that an effort for justice was at once set on foot by his friends. He declared that he would never wear a sword again. General Sherman, however, persuaded him to a different view, and when censure was removed Grant resumed his old command.

Presently Halleck was raised to the dignity of commander-in-chief. Grant, as next in rank, was placed at the head of the Western army. Here the "tanner boy" found himself in command of sixty thousand men, and the pressure of his responsibilities so spurred his faculties that people were amazed at his extraordinary nature. He was a mystery whom none could solve. "A soldier especially fitted for command, undisturbed by danger, immutable in resolve, ready for responsibility, sustained in energy. The greater the emergency the more absolutely his nature responded, and yet, like many

men of genius, he was positively inefficient outside of his proper sphere. 'Hercules himself was not good at the distaff, nor Pegasus at the plow.'

On his forty-second birthday, Grant was commander-in-chief of the National army of some half a million soldiers; the position of lieutenant-general had been created expressly for him. In May, 1864, he began that long series of battles, marches, sieges, and campaigns, in which he controlled the armies of Sheridan, Thomas, Meade, and Sherman, and which at last ended in the surrender of Lee's army at Appomattox. General Adam Badeau, a member of Grant's staff, writes: "Nothing in Grant's whole career redounds more to the credit of his head as well as his heart than the terms he granted Lee. To impose no humiliation, to inflict no penalties on his defeated countrymen, was political wisdom of the highest order. And these terms were Grant's alone. The North was surprised at them; Lincoln did not suggest them; Andrew Johnson at first disapproved them; Congress would certainly not have suggested them; but at Appomattox the victor dictated to the North as well as to the South. His countrymen accepted on that day whatever he who had done so much for them in the past considered wise for them in the future, and the possibility of another rising of the South was averted forever. No Richlieu or Bismarck, by one superlative stroke of statesmanship, ever achieved on a single day so much for his country. No act of Lincoln or Washington was more beneficent to the nation or more important to mankind than this far-reaching grasp of patriotism with which Grant brought back the beaten, broken Confederacy into the Union. The peace that he there secured was a greater glory than the victories that he won."

Grant left the army with a most friendly feeling in

his heart for the South. It was his desire quickly to re-establish "perpetual peace and harmony with that enemy whose manhood, however mistaken the cause, drew forth such herculean deeds of valor." In these sentiments Lincoln fully concurred, but alas! his cruel assassination sadly blocked the way and well-nigh wrung the heart of the general, who hurried from Philadelphia to give his hearty support to the misguided Johnson. During the conflict between the President and Mr. Stanton, General Grant, much against his inclination, served as Secretary of War for five months, and was thereby plunged into a battle of politics as fierce as any he had fought in the field. Here he restrained the hottest spirits on both sides and altogether displayed such calm judgment and statesmanship that for a long time the South looked upon him as their most powerful friend. They could not forget his magnanimity at Appomatox.

A few days before his forty-seventh birthday, the tanner's son fulfilled the long cherished hopes of his father. He became president of the United States, filling the office for two successive terms. "He was an able and patriotic ruler, whose firmness and high sense of duty and honor restored peace and honor at home and made the United States respected and honored abroad." On his tour around the world, which followed his retirement from office, he was everywhere met by the most flattering demonstrations. The Prince of Wales welcomed him; Queen Victoria received him and Mrs. Grant as her guests at Windsor Castle; the cities of London, Edinburgh, and Glasgow tendered to him their freedom; at Cairo, he was royally entertained by the khedive; at Constantinople, the sultan gave him a warm reception; at Rome, Pope Leo XIII. and King Humbert extended to him kindly greetings; at Berlin, he had a most cordial meeting with Bismarck; at St.

Petersburg, Vienna, and Madrid, he was received by the sovereigns. The king of Siam placed a palace at his disposal; at Canton, the Chinese viceroy had prepared the people for the advent of the "king of America." At Tokio, the emperor received him with singular warmth.

On his return to America the great military hero entered the trade arena, as the private partner of a Wall Street broker, hoping thus to swell his inadequate fortune of \$100,000. Luck favored him: in two years his wealth increased ten-fold, he became a millionaire. For the first time in his life he had a bank account which he was not afraid of overdrawing. Fortune, however, was not disposed long to smile upon him. Within a week of his sixty-second birthday, through the machinations of his partner, General Grant became bankrupt. He at once gave up everything he had in the world, even the presents which admiring countrymen and foreign potentates had lovingly presented to him. Then, in spite of the protests of loyal friends and the disease which fastened upon him, he began the writing of his "Personal Memoirs" with which he hoped to secure a competence for his family.

"Nothing," says one of his biographers, "can be imagined more unacceptable to General Grant's native disposition than the narration for the public of his own life story. But in his circumstances, the question was not one of sentiment, but only of duty to those who were dependent upon him. The task was undertaken resolutely, and, in spite of physical weakness and suffering, was carried on with as high and faithful energy as he had shown in any campaign of the war. On March 3, 1885, he was restored to the army with the rank of general on the retired list with full pay. He was glad;

but in his feebleness joy was as hard to bear as grief. He began failing more rapidly.

"In June" (writes Allen) "he was taken to the sweet tonic air of a cottage on Mount McGregor, near Saratoga. Here, in pleasant weather, he could sit in the open air and enjoy the agreeable prospect. But whether indoors or out, he toiled at the book at every possible moment, writing with a pencil on tablets while he had the strength, then dictating in almost inaudible whispers, little by little, to his secretary. So, toilsomely, through intense suffering, sustained by an indomitable will, this legacy to his family and the world was completed to the end of the war. His last battle was won. Four days after the victory, he died, July 25, 1885. The book had a success beyond all expectations, and accomplished the purpose of its author. To his countrymen it was a revelation of the heart of the man, Ulysses Grant, in its nobility, its simplicity, and its charity, that has endeared him beyond any knowledge afforded by his outward life."

During his last days the general was inexpressibly comforted by the kind messages which poured in from all over the world, "from people of all nationalities, of all religions and of no religion, of Confederate and National troops alike." When he was no more, unlimited condolences poured from the same source to the bereaved family. His body lay in state for three days at the City Hall in New York. Then a magnificent funeral cortege, the most imposing ever seen in America, composed of 50,000 men in line, bore him away to his last resting place in Riverside park, where those who had in bygone years struggled in deadly conflict now mingled their tears over the bier of the brave and patriotic soldier, the friend of the North and the South

alike. Memorial services were held throughout the country from the Atlantic to the Pacific, and even in Westminster Abbey, that the world might pay tribute to the great and good man, who though a warrior, loved peace, and who, could he have witnessed his own funeral, would probably have voiced again the sentiments of General Buckner, who surrendered to him at Fort Donelson and who was one of the pall-bearers in the last sad rites: "We may now well look forward to a perpetual peace at home, and a national strength that will screen us against any foreign complication. I believe myself that the war was worth all it cost us, fearful as that was."

Over his tomb this simple epitaph is inscribed:

"Let us have peace."

JAMES B. EADS

ON the steamship "Germanic" I played chess with the great civil engineer, Captain Eads, stimulated by the thought that to beat him was to defeat the man who had twice conquered the Mississippi. But I didn't defeat him.

The building of a ship-canal across the Isthmus of Suez made famous the Frenchman, Ferdinand de Lesseps: so the opening-up of the mouth of the Mississippi River has distinguished Captain Eads. Later both of these men contested for the rare honor of joining, at the Isthmus of Panama, the waters of the great Atlantic and Pacific; a magnificent scheme, which, when completed by other hands, was to save annually thousands of miles of dangerous sea-voyage around Cape Horn, besides millions of money.

The "Great West" seems to delight in producing self-made men like Lincoln, Grant, and Eads.

James B. Eads was born in Indiana in 1820. This was the sparsely settled Indiana of Abraham Lincoln's boyhood. In 1833, his father started down the Ohio River with his family proposing to settle in Wisconsin. The boat caught fire, and his scanty furniture and clothing were burned. Young Eads barely escaped ashore with his pantaloons, shirt, and cap. Taking passage on another boat, this boy of thirteen landed at St. Louis with his parents; his little bare feet first touching the rocky shore of the city on the very spot where he afterwards located and built one of the largest steel bridges in

the world, over the Mississippi,—one of the most difficult feats of engineering performed in America.

At the age of nine, young Eads made a short trip on the Ohio, when the engineer of the steamboat explained to him so clearly the construction of the steam-engine, that, before he was a year older, he built a little working model of it, so perfect in its parts and movements, that his schoolmates would frequently go home with him after school to see it work. A locomotive engine driven by a concealed rat was one of his next juvenile feats in mechanical engineering. From eight to thirteen he attended school; after which, from necessity, he was placed as clerk in a dry-goods store.

How few young people of the many to whom poverty denies an education, either understand the value of the saying, "knowledge is power," or exercise will sufficient to overcome obstacles. Will-power and thirst for knowledge elevated General Garfield from driving canal horses to the presidency of the United States.

Over the store in St. Louis, where he was engaged, his employer lived. He was an old bachelor, and having observed the tastes of his clerk, gave him his first book in engineering. The old gentleman's library furnished evening companions for him during the five years he was thus employed. Finally, his health failing, at the age of nineteen he went on a Mississippi River steamer; from which time to the end of his life that great river was an all-absorbing study.

Soon afterwards he formed a partnership with a friend, and built a small boat to raise cargoes of vessels sunken in the Mississippi. While this boat was building, he made his first venture in submarine engineering, on the lower rapids of the river, by the recovery of several hundred tons of lead. He hired a scow or flat-boat,

and anchored it over the wreck. An experienced diver, clad in armor, who had been hired at considerable expense in Buffalo, was lowered into the water; but the rapids were so swift that the diver, though incased in the strong armor, feared to be sunk to the bottom. Young Eads determined to succeed, and, finding it impracticable to use the armor, went ashore, purchased a whiskey-barrel, knocked out the head, attached the air-pump hose to it, fastened several heavy weights to the open end of the barrel; then, swinging it on a derrick, he had a practical diving-bell—the best use I ever heard made of a whiskey-barrel.

Neither the diver, nor any of the crew, would go down in this contrivance: so the dauntless young engineer, having full confidence in what he had read in books, was lowered within the barrel down to the bottom; the lower end of the barrel being open. The water was sixteen feet deep, and very swift. Finding the wreck, he remained by it a full hour, hitching ropes to pig-lead till a ton or more was safely hoisted into his own boat. Then, making a signal by a small line attached to the barrel, he was lifted on deck, and in command again. The sunken cargo was soon successfully raised, and was sold, and netted a handsome profit, which, increased by other successes, enabled energetic Eads to build larger boats, with powerful pumps, and machinery on them for lifting entire vessels. He surprised all his friends in floating even immense sunken steamers—boats which had long been given up as lost.

When the Civil War came, it was soon evident that a strong fleet must be put upon Western rivers to assist our armies. Word came from the government to Captain Eads to report in Washington. His thorough knowledge of the "Father of Waters" and its tributaries,

and his practical suggestions, secured an order to build seven gunboats, and soon after an order for the eighth was given.

In forty-eight hours after receiving this authority his agents and assistants were at work; and suitable ship-timber was felled in half a dozen Western States for their hulls. Contracts were awarded to large engine and iron works in St. Louis, Pittsburgh, and Cincinnati; and within one hundred days, eight powerful iron-clad gunboats, carrying over one hundred large cannon, and costing a million dollars, were achieving victories no less important for the Mississippi Valley than those which Ericsson's famous "cheese-box Monitor" afterwards won on the James River.

These eight gunboats, Commodore Foote ably employed in his brave attacks on Forts McHenry and Donaldson. They were the first ironclads the United States ever owned. Captain Eads covered the boats with iron: Commodore Foote covered them with glory.

Eads built not less than fourteen of these gunboats. During the war, the models were exhibited by request to the German and other governments. His next work was to throw across the mighty Mississippi River, nearly half a mile wide, at St. Louis, a monstrous steel bridge, supported by three arches, the spans of two being five hundred and two feet long, and the central one five hundred and twenty feet. The huge piles were ingeniously sunk in the treacherous sand, one hundred and thirty-six feet below the flood-level to the solid rock, through ninety feet of sand. This bridge and its approaches cost eighty millions of dollars, and is used by ten or twelve railroad companies. Above the tracks is a big street with carriage-roads, street-cars, and walks for foot-passengers.

The honor of building one of the finest of bridges

would have satisfied most men, but not ambitious Captain Eads. He actually loved the noble river in which De Soto, its discoverer, was buried, and fully realized the vast, undeveloped resources of its rich valleys. Equally well he understood what a gigantic work in the past the river and its fifteen hundred sizable tributaries had accomplished in times of freshets, by depositing soil and sand north of the original Gulf of Mexico, forming an alluvial plain five hundred miles long, sixty miles wide, and of unknown depth, and having a delta extending out into the Gulf, sixty miles long, and as many miles wide, and probably a mile deep. And yet this heroic man, although jealously opposed for years by West Point engineers, having a sublime confidence in the laws of nature, and actuated by intense desire to benefit mankind, dared to stand on the immense sand-bars at the mouth of this defiant stream, and, making use of the jetty system, bid the river itself dig a wide, deep channel into the seas beyond, for the world's commerce.

Captain Eads, who had studied the improvements on the Danube, Maas, and other European rivers, observed that all rivers flow faster in their narrow channels, and carry along in the swift water, sand, gravel, and even stones. This familiar law he applied at the South Pass of the Mississippi River, where the waters, though deep above, escaped from the banks into the Gulf, and spread sediment far and wide.

The water on the sand-bars of the three principal passes varied from eight to thirteen feet in depth. Many vessels require twice that depth. Two piers, twelve hundred feet apart, were built from land's end, a mile into the sea. They were made from willows, timber, gravel, concrete, and stone. Mattresses, a hundred feet long, from twenty-five to fifty feet wide, and two feet thick, were constructed from small willows placed at

right angles, and bound securely together. These were floated into position, and sunk with gravel, one mattress upon another, which the river soon filled with sand that firmly held them in their place. The top was finished with heavy concrete blocks, to resist the waves. These piers are called "jetties," and the swift-flowing waters presently carried over five million cubic yards of sand into the deep gulf, and made a ship-way over thirty feet deep. The five million dollars paid by the United States was little enough for so priceless a service.

In June, 1884, Captain Eads received the Albert medal of the British Society of Arts, the first American upon whom this honor has been conferred. Before his great enterprise of the Tehuantepec ship railroad had been completed, he died at Nassau, New Providence, Bahama Islands, March 8, 1887, after a brief illness, of pneumonia, at the age of sixty-seven.

BAYARD TAYLOR

SINCE Samuel Johnson toiled in Grub Street, London, literature has scarcely furnished a more pathetic or inspiring illustration of struggle to success than that of Bayard Taylor. Born of Quaker parentage in the little town of Kennett Square, near Philadelphia, Jan. 11, 1825, he grew to boyhood in the midst of fresh air and the hard work of farm-life. His mother, a refined and intelligent woman, who taught him to read at four, and who early discovered her child's love for books, shielded him as far as possible from picking up stones and weeding corn, and set him to rocking the baby to sleep. What was her amazement one day, on hearing loud cries from the infant, to find Bayard absorbed in reading, and rocking his own chair furiously, supposing it to be the cradle! It was evident, that, though such a boy might become a fine literary man, he could not be a successful baby-tender.

He was especially eager to read poetry and travels, and, before he was twelve years old, had devoured the contents of their small circulating library, as well as Cooper's novels, and the histories of Gibbon, Robertson, and Hume. The few books which he owned were bought with money earned by selling nuts which he had gathered. He read Milton, Scott, Byron, and Wordsworth; and his mother would often hear him repeating poetry to his brother after they had gone to bed. He was always planning journeys in Europe, which seemed very far from being realized. At fourteen he began to

study Latin and French, and at fifteen, Spanish; and a year later he assisted in teaching at the academy where he was attending school.

He was ambitious; but there seemed no open door. There is never an open door to fame or prosperity, except we open it for ourselves. The world is too busy to help others; and assistance usually weakens rather than strengthens us. About this time he received, through request, an autograph from Charles Dickens, then lecturing in this country. The boy of sixteen wrote in his journal: "It was not without a feeling of ambition that I looked upon it; that as he, a humble clerk, had risen to be the guest of a mighty nation, so I, a humble pedagogue, might, by unremitting and arduous intellectual and moral exertion, become a light, a star, among the names of my country. May it be! . . . I believe all poets are possessed in a greater or less degree of ambition. I think this is never given without a mind of sufficient power to sustain it, and to achieve its lofty object."

At seventeen, Bayard's schooling was over. He sketched well, and would gladly have gone to Philadelphia to study engraving; but he had no money. One poem had been published in the *Saturday Evening Post*. Those only who have seen their first poem in print can experience his joy. But writing poetry would not earn him a living. He had no liking for teaching, but, as that seemed the only thing at hand, he would try to obtain a school. He did not succeed, however, and apprenticed himself for four years to a printer. He worked faithfully, using all his spare hours in reading and writing poetry.

Two years later, he walked to Philadelphia and back—thirty miles each way—to see if fifteen of his poems could not be printed in a book! His ambition evidently

had not abated. Of course no publisher would take the book at his own risk. There was no way of securing its publication, therefore, but to visit his friends, and solicit them to buy copies in advance. This was a trying matter for a refined nature; but it was a necessity. He hoped thus to earn a little money for travel, and "to win a name that the person who shall be chosen to share with me the toils of life will not be ashamed to own." This "person" was Mary Agnew, whose love and that of Bayard Taylor form one of the saddest and tenderest pictures in our literature.

At last the penniless printer boy had determined to see Europe. For two years he had read every thing he could find upon travels abroad. His good mother mourned over the matter, and his acquaintances prophesied dire results from such a roving disposition. He would again go to Philadelphia, and see if the newspapers did not wish correspondence from Europe. All the editors politely declined the ardent boy's proposals. Probably he did not know that "unknown writers" are not wanted.

About to return home, "not in despair," he afterwards wrote, "but in a state of wonder as to where my funds would come from, for I felt certain they would come," the editor of the *Saturday Evening Post* offered him four dollars a letter for twelve letters,—fifty dollars,—with the promise of taking more if they were satisfactory. The *United States Gazette* made a similar offer, and, after selling a few manuscript poems which he had with him, he returned home in triumph, with a hundred and forty dollars in his pocket! "This," he says, "seemed sufficient to carry me to the end of the world."

Immediately Bayard and his cousin started on foot for Washington, a hundred miles, to see the member of

Congress from their district, and obtain passports from him. Reaching a little village on their way thither, they were refused lodgings at the tavern because of the lateness of the hour,—nine o'clock!—and walked on till near midnight. Then seeing a house brilliantly lighted, as for a wedding, they approached, and asked the proprietor whether a tavern were near by. The man addressed turned fiercely upon the lads, shouting, "Begone! Leave the place instantly. Do you hear? Off!" The amazed boys hastened away, and at three o'clock in the morning, footsore and faint, after a walk of nearly forty miles, slept in a cart standing beside an old farm-house.

And now at nineteen, he was in New York, ready for Europe. He called upon the author, N. P. Willis, who had once written a kind note to him; and this gentleman, with a ready nature in helping others,—alas! not always found among writers—gave him several letters of introduction to newspaper men. Mr. Greeley said bluntly when applied to, "I am sick of descriptive letters, and I will have no more of them. But I should like some sketches of German life and society, after you have been there, and know something about it. If the letters are good, you shall be paid for them; but don't write *until you know something.*"

July 1, 1844, Bayard and two young friends, after paying ten dollars each for steerage passage, started out upon this eventful voyage. No wonder that, as land faded from sight, and he thought of gentle Mary Agnew and his devoted mother, his heart failed him, and he quite broke down. After twenty-eight days they landed in Liverpool, strangers, poor, knowing almost nothing of the world, but full of hope and enthusiasm. They spent three weeks in Scotland and the north of England, and then travelled through Belgium to Heidelberg. Bayard passed the first winter in Frankfort, in the plainest

quarters, and then, with his knapsack on his back, visited Leipzig, Dresden, Prague, Vienna, and Munich. After this he walked over the Alps, and through Northern Italy, spending four months in Florence, and then visiting Rome. Often he was so poor that he lived on twenty cents a day. Sometimes he was without food for nearly two days, writing his natural and graphic letters when his ragged clothes were wet through, and his body faint from fasting. But the manly, enthusiastic youth always made friends by his good cheer and unselfishness.

At last he was in London, with but thirty cents to buy food and lodging. But he had a poem of twelve hundred lines in his knapsack, which he supposed any London publisher would be glad to accept. He offered it; but it was "declined with thanks." The youth had not learned that Bayard Taylor unknown, and Bayard Taylor famous in two hemispheres, were two different names upon the title-page of a book. Publishers cannot usually afford to do missionary work in their business; they print what will sell. "Weak from seasickness," he says, "hungry, chilled, and without a single acquaintance in the great city, my situation was about as hopeless as it is possible to conceive."

Possibly he could obtain work in a printer's shop. This he tried hour after hour, and failed. Finally he spent his last twopence for bread, and found a place to sleep in a third-rate chop-house, among sailors, and actors from the lower theatres. He rose early, so as not to be asked to pay for his bed, and again sought work. Fortunately he met an American publisher, who loaned him five dollars, and with a thankful heart he returned to pay for his lodging. For six weeks he staid in his humble quarters, wrote letters home to the newspapers, and also sent various poems to the English journals, which were all returned to him. For two years he

supported himself on two hundred and fifty dollars a year, earning it all by writing. "I saw," he says, "almost nothing of intelligent European society; but literature and art were, nevertheless, open to me, and a new day had dawned in my life."

On his return to America he found that his published letters had been widely read. He was advised to put them in a book; and "Views Afoot," with a preface by N. P. Willis, were soon given to the world. Six editions were sold the first year; and the boy who had seen Europe in the midst of so much privation, found himself an author, with the prospect of fame. Not alone had poverty made these two years hard to bear. He was allowed to hold no correspondence with Mary Agnew, because her parents steadily refused to countenance the young lovers. He had wisely made his mother his confidante, and she had counselled patience and hope. The rising fame possibly smoothed the course of true love, for at twenty-one, Bayard became engaged to the idol of his heart. She was an intelligent and beautiful girl, with dark eyes and soft brown hair, and to the ardent young traveller seemed more angel than human. He showed her his every poem, and laid before her every purpose. He wrote her, "I have often dim, vague forebodings that an eventful destiny is in store for me"; and then he added in quaint, Quaker dialect, "I have told thee that existence would not be endurable without thee; I feel further that thy aid will be necessary to work out the destinies of the future. . . . I am really glad that thou art pleased with my poetry. One word from thee is dearer to me than the cold praise of all the critics in the land."

For the year following his return home, he edited a country paper, and thereby became involved in debts which required the labors of the next three years to

cancel. He now decided to go to New York if possible, where there would naturally be more literary society, and openings for a writer. He wrote to editors and publishers; but there were no vacancies to be filled. Finally he was offered enough to pay his board by translating, and this he gladly accepted. By teaching literature in a young ladies' school, he increased his income to nine dollars a week. Not a luxurious amount, surely.

For a year he struggled on, saving every cent possible, and then Mr. Greeley gave him a place on the *Tribune*, at twelve dollars a week. He worked constantly, often writing poetry at midnight, when his day's duties were over. He made true friends, such as Stedman and Stoddard, published a new book of poems; and in the beginning of 1849 life began to look full of promise. Sent by his paper to write up California, for six months he lived in the open air, his saddle for his pillow, and on his return wrote his charming book "Eldorado." He was now twenty-five, out of debt, and ready to marry Mary Agnew. But a dreadful cloud had meantime gathered and burst over their heads. The beautiful girl had been stricken with consumption. The May day bridal had been postponed. "God help me, if I lose her!" wrote the young author to Mr. Stoddard from her bedside. Oct. 24 came, and the dying girl was wedded to the man she loved. Four days later he wrote: "We have had some heart-breaking hours, talking of what is before us, and are both better and calmer for it." And, later still: "She is radiantly beautiful; but it is not the beauty of earth. . . . We have loved so long, so intimately, and so wholly, that the footsteps of her life have forever left their traces in mine. If my name should be remembered among men, hers will not be forgotten." Dec. 21, 1850, she went beyond; and Bayard Taylor,

at twenty-six was alone in the world, benumbed, unfitted for work of any kind. "I am not my true self more than half the time. I cannot work with any spirit: another such winter will kill me, I am certain. I shall leave next fall on a journey somewhere—no matter where," he wrote a friend.

Fortunately he took a trip to the Far East, travelling in Egypt, Asia Minor, India, and Japan for two years, writing letters which made him known the country over. On his return, he published three books of travel, and accepted numerous calls in the lecture-field. His stock in the *Tribune* had become productive, and he was gaining great success.

His next long journey was to Northern Europe, when he took his brother and two sisters with him, as he could enjoy nothing selfishly. This time he saw much of the Brownings and Thackeray, and spent two days as the guest of Tennyson. He was no longer the penniless youth, vainly looking for work in London to pay his lodging, but the well-known traveller, lecturer, and poet. Oct. 27, 1857, seven years after the death of Mary Agnew, he married the daughter of a distinguished German astronomer, Marie Hansen, a lady of great culture, whose companionship ever proved a blessing.

Tired of travel, Mr. Taylor now longed for a home for his wife and infant daughter, Lilian. He would erect on the old homestead, where he played when a boy, such a house as a poet would love to dwell in, and such as poet friends would delight to visit. So, with minutest care and thought, "Cedarcroft," a beautiful structure, was built in the midst of two hundred acres. Every flower, every tree, was planted with as much love as Scott gave to "Abbotsford." But, when it was completed, the old story had been told again, of expenses

going far beyond expectations, and, instead of anticipated rest, there came toil and struggle to pay debts, and provide for constant outgoes.

But Bayard Taylor was not the man to be disturbed by obstacles. He at once set to work to earn more than ever by his books and lectures. With his characteristic generosity he brought his parents and his sisters to live in his home, and made everybody welcome to his hospitality. The "Poet's Journal," a poem of exquisite tenderness, was written here, and "Hannah Thurston," a novel, of which fifteen thousand were soon sold.

Shortly after the beginning of our civil war, Mr. Taylor was made Secretary of Legation at Russia. He was now forty years of age, loved, well-to-do, and famous. His novels—"John Godfrey's Fortunes" and the "Story of Kennett"—were both successful. The "Picture of St. John," rich and stronger than his other poems, added to his fame. But the gifted and versatile man was breaking in health. Again he travelled abroad, and wrote "Byways in Europe." On his return he translated, with great care and study, "Faust," which will always be a monument to his learning and literary skill. He published "Lars, a Norway pastoral," and gave delightful lectures on German literature at Cornell University, and Lowell and Peabody Institutes, at Boston and Baltimore.

At last he wearied of the care and constant expense of "Cedarcroft." He needed to be near the New York libraries. Mr. Greeley had died, his newspaper stock had declined, and he could not sell his home, as he had hoped. There was no alternative but to go back in 1871 into the daily work of journalism in the *Tribune* office. The rest which he had longed for was never to come. For four years he worked untiringly, delivering the

Centennial Ode at our Exposition, and often speaking before learned societies.

In 1878, President Hayes bestowed upon him a well-deserved honor, by appointing him minister to Berlin. Germany rejoiced that a lover of her life and literature had been sent to her borders. The best of New York gathered to say good-bye to the noted author. Arriving in Berlin, Emperor William gave him cordial welcome, and Bismarck made him a friend. A pleasant residence was secured, and furniture purchased. At last he was to find time to complete a long-desired work, the Lives of Goethe and Schiller. "Prince Deukalion," his last noble poem, had just reached him. All was ready for the best and strongest work of his life, when, lo! the overworked brain and body gave way. He did not murmur. Only once, Dec. 19, he groaned, "I want—I want—oh, you know what I mean, that *stuff of life!*" It was too late. At fifty-three the great heart, the exquisite brain, the tired body, were still.

"Dead he lay among his books;
The peace of God was in his looks."

Germany as well as America wept over the bier of the once poor Quaker lad, who travelled over Europe with scarce a shilling in his pocket, now, by his own energy, brought to one of the highest positions in the gift of his country. The great of Germany gathered about his coffin, Bertold Auerbach speaking beautiful words.

March 13, 1879, the dead poet lay in state in the City Hall at New York, in the midst of assembled thousands. The following day the body was borne to "Cedarcroft," and, surrounded by literary associates and tender friends, laid to rest. Public memorial meetings were held in various cities, where Holmes, Longfellow, Whittier, and

others gave their loving tributes. A devoted student, a successful diplomat, a true friend, a noble poet, a gifted traveller, a man whose life will never cease to be an inspiration,—such was Bayard Taylor.

PHILIP HENRY SHERIDAN

It is sometimes said that circumstances make the man; but there must be something in the man, or circumstances, however favorable, cannot develop it. A poor lad, born of Irish parents in the little western town of Somerset, Ohio, working at twenty-four dollars a year, would never have come to the lieutenant-generalship of the United States, unless there was something noteworthy in the lad himself.

Philip Henry Sheridan, a generous, active boy, after having studied arithmetic, geography, and spelling at the village school, began to work in a country store in 1843, at the early age of twelve, earning fifty cents a week, fortunately, still keeping his home with his mother. He was fond of books, especially of military history and biography; and when he read of battles, he had dreams of one day being a great soldier. Probably the keeper of the store where Philip worked, and his boyish companions, thought these dreams useless air-castles.

After some months, quickness and attention to business won a better position for him, where he obtained one dollar and a half a week. So useful had he become, that at seventeen he acted as bookkeeper and manager of quite a business for the munificent wages of three dollars a week.

He had not forgotten his soldier ambition, and applied to the member of Congress from his county, Perry, for appointment to West Point. Hon. Thomas Ritchey was pleased with the boy's determination and energy, and

though most of these places were given to those whose fathers had served in the Mexican War, Philip was not forgotten. He took a preliminary examination in the common branches, and, much to his surprise, received the appointment. Feeling greatly his need of more knowledge, his room-mate, Henry W. Slocum, afterwards a major-general, assisted him in algebra and geometry. The two boys would hang blankets at the windows of their room, and study after the usual limit for the putting out of lights and retiring.

Graduating in 1853, he was made second lieutenant in the United States Infantry, and assigned to Fort Duncan on the western boundary of Texas, which at that time seemed wellnigh out of the world. Here he came much in contact with the Apache and Comanche Indians, warlike and independent tribes.

One day, as Sheridan was outside the fort with two other men, a band of Indians swooped down upon them. The chief jumped from his horse to seize his prisoners, when Sheridan instantly sprang upon the animal's back, and galloped to Fort Duncan. Hastily summoning his troops, he rushed back to save his two friends. The enraged chief sprang toward him, when a ball from Sheridan's rifle laid him dead upon the ground. His ready thought had saved his own life and that of his friends.

Two years later he was made first lieutenant, and sent to Oregon as escort to an expedition surveying for a branch of the Pacific Railway. The region was wild and almost unknown, yet beautiful and full of interest. This life must have seemed inspiring compared with the quiet of the Somerset store.

Chosen very soon to take charge of an Indian campaign, his fearlessness, his quick decision and cautiousness as well, made him a valuable leader. The Indians

could endure hardships; so could Sheridan. Sometimes he carried his food for two weeks in his blanket, slung over his shoulder, and made the ground his bed at night. The Indians could scale rocks and mountains; so could the young officer.

A severe encounter took place at the Cascades, on the Columbia River, April 28, 1856, where, by getting in the rear of the Indians, he completely vanquished them. For this strategy, he was especially commended by Lieutenant-General Scott. However, he won the confidence of the Indian tribes for probity and honesty in his dealings with them.

When the Civil War began, he was eager to help the cause of the Union, and in 1861 was made captain and chief quartermaster in south-western Missouri, on the staff of Major-General Curtis. He was quiet and unassuming, accurate in business matters, and thoroughly courteous. Perhaps now that he had learned more of army life by nine and a half years of service, he was less sanguine of high renown than in his boyish days; for he told a friend that "he was the sixty-fourth captain on the list, and with the chances of war, thought he might soon be a major."

It required executive ability to provide for the subsistence of a great army, but Sheridan organized his depots of supplies and transportation trains with economy and wisdom, for the brave men who fought under Sigel. With a high sense of honor, Sheridan objected to the taking of any private property from the enemy, for self-aggrandizement, as was the case with some officers, and asked to be relieved from his present position.

Fortunately he was appointed on the staff of General Halleck in Tennessee, a man who soon learned the faithfulness and ability of his captain; and when the Governor of Michigan asked for a good colonel for the

Second Michigan Cavalry, Sheridan was chosen. After sharing in several engagements around Corinth, he was attacked July 1, 1862, at Booneville, by a force of nine regiments, numbering nearly five thousand men. He had but two regiments! What could he do? Selecting ninety of his best men, armed with guns and sabres, he sent them four miles around a curve to attack the enemy's rear, and promised to attack at the same time in front. When the moment came, he rushed upon the foe as though he had an immense army at his back, while the handful of men in the rear charged with drawn sabres. The Confederates were thrown into confusion, and, panic-stricken, rushed from the field, leaving guns, knapsacks, and coats behind them. Sheridan chased them for twenty miles.

This deed of valor won the admiration of General Grant, who commended him to the War Department for promotion. He was at once made brigadier-general. Perhaps the boyish dreams of being a great soldier would not turn out to be air-castles after all. Men love to fight under a man who knows what to do in an emergency, and Sheridan's men, who called him "Little Phil," had the greatest faith in him.

In the fall, he was needed to defend Louisville against General Bragg. This Confederate officer had been told that he would find recruits and supplies in abundance if he would come to Kentucky. He came therefore, bringing arms for twenty thousand men, but was greatly disappointed to find that not half that number were willing to cast in their lot with the Southerners. General Buell, of the Union army, received, on the contrary, over twenty thousand new soldiers here. Bragg prepared to leave the State, sending his provision train ahead, and made a stand at Perryville, Kentucky. Here Sheridan played "a distinguished part, holding the key

of the Union position, and resisting the onsets of the enemy again and again, with great bravery and skill, driving them at last from the open ground in front by a bayonet charge. The loss in Sheridan's division in killed and wounded was over four hundred, but his generalship had saved the army from defeat."

Bragg determined now to make one great effort to hold Tennessee, and, Dec. 31, 1862, gave battle at Stone River, near Murfreesboro'. General Rosecrans had succeeded Buell as commander of the Army of the Cumberland. Being a Romanist, high mass was celebrated in his tent just before the battle, the officers, booted and spurred, standing outside with heads uncovered. The conflict began on the right wing, the enemy advancing six lines deep. Our troops were mowed down as by a scythe. Sheridan sustained four attacks of the enemy, and four times repulsed them, swinging his hat or his sword, as he rode among his men, and changing his front under fire, till, his ammunition exhausted, he brought out his shattered forces in close column, with colors flying. Pointing sadly to them, he said to Rosecrans, "Here is all that are left, General. My loss is seventeen hundred and ninety-six,—my three brigade commanders killed, and sixty-nine other officers; in all seventy-two officers killed and wounded." The men said proudly, "We came out of the battle with compact ranks and empty cartridge-boxes!"

Even after this Sheridan recaptured two pieces of artillery, and routed the same men who had driven him. For noble conduct on the field he was made major-general of volunteers.

General Rosecrans says of him in his official report, "At Stone River he won universal admiration. Upon being flanked and compelled to retire, he withdrew his command more than a mile, under a terrible fire, in re-



P. A. Sheridan

markable order, at the same time inflicting the severest punishment upon the foe. The constancy and steadfastness of his troops on the 31st of December enabled the reserve to reach the right of our army in time to turn the tide of battle, and changed a threatened rout into a victory."

General Rosecrans showed himself dauntless in courage. When a shell took off the head of his faithful staff-officer, Garesché, riding by his side, to whom he was most tenderly attached, he only said, "I am *very* sorry; we cannot help it. This battle must be won." Dashing up to a regiment lying on the ground waiting to be called into action, he said, while shot and shell were whizzing furiously around him, "Men, do you wish to know how to be safe? Shoot low. But do you wish to know how to be safest of all? Give them a blizzard and then charge with cold steel! Forward, men, and show what you are made of!"

After the day's bloody battle, the troops lay all night on the cold ground where they had fought. "When," says the heroic General Rousseau, "I saw them parch corn over a few little coals into which they were permitted to glow a spark of life; when they carved steak from the loins of a horse which had been killed in battle, and ate, not simply without murmuring, but made merry over their distress, tears involuntarily rolled from my eyes."

At midnight it rained upon the soldiers, and the fields became masses of mud; yet before daylight they stood at their guns. "On the third day," says Rosecrans, "the firing was terrific and the havoc terrible. The enemy retreated more rapidly than they had advanced. In forty minutes they lost two thousand men." All that night the Federals worked to entrench the front of the army. Saturday hundreds of wounded lay in the the mud and rain, as the enemy had destroyed so many

of our hospital tents. On Sunday morning it was found that the Confederates had departed, leaving twenty-five hundred of their wounded in Murfreesboro' for us to take care of. Burial parties were now sent out to inter the dead. The Union loss in killed and wounded was eight thousand seven hundred and seventy-eight; the enemy's loss ten thousand one hundred and twenty-five.

Sheridan's next heavy fighting was at Chickamauga. The battle was begun by Bragg on Sept. 19, 1863. The right of our army had been broken to pieces, but General Thomas, the idol of his men, stood on the left like a rock, Sheridan assisting, and refused to be driven from the field. General Henry M. Cist, in his "Army of the Cumberland" says, "There is nothing finer in history than Thomas at Chickamauga." Sheridan lost over one-third of his four thousand men and ninety-six officers. The Federal loss was over sixteen thousand; the Confederate, over twenty thousand.

There were heroic deeds on this as on every battlefield. When a division of the Reserve Corps—brave men they were, too—wavered under the storm of lead, General James B. Steedman rode up, and taking the flag from the color-bearer, cried out, "Go back, boys, go back, but the Flag can't go with you!" and dashed into the fight. The men rallied, closed their column, and fought bravely to the death. Even the drummer-boy, Johnny Clem, from Newark, Ohio, ten years old, near the close of the battle, when one of Longstreet's colonels rode up, and with an oath commanded him to surrender, sent a bullet through the officer's heart. Rosecrans, made him a sergeant, and the daughter of Secretary Chase gave him a silver medal.

Two months later, the battle of Chattanooga redeemed the defeat of Chickamauga. Near the town rises Look-

out Mountain, abrupt, rocky cliffs twenty-four hundred feet above the level of the sea, and Missionary Ridge, both of which were held by the enemy. On Nov. 24, Lookout was stormed and carried by General Hooker in the "Battle above the Clouds." On the following day Missionary Ridge was to be assaulted. Sheridan held the extreme left for General Thomas. Before him was a wood, then an open plain, several hundred yards to the enemy's rifle-pits; and then beyond, five hundred yards covered with rocks and fallen timber to the crest, where were Bragg's heaviest breastworks. At three o'clock in the afternoon the signal to advance—six guns fired at intervals of two seconds—was given. As Sheridan shouted, "Remember Chickamauga!" the men dashed over the plain at double-quick, their glittering bayonets ready for deadly work. Says Benjamin F. Taylor, who was an eye-witness, "Never halting, never faltering, they charged up to the first rifle-pits with a cheer, forked out the rebels with their bayonets, and lay there panting for breath. If the thunder of guns had been terrible, it was now growing sublime. It was rifles and musketry; it was grape and canister; it was shell and shrapnel. Mission Ridge was volcanic; a thousand torrents of red poured over its brink and rushed together to its base.

"They dash out a little way, and then slacken; they creep up, hand over hand, loading and firing, and wavering and halting, from the first line of works to the second; they burst into a charge with a cheer, and go over it. Sheets of flame baptize them; plunging shot tear away comrades on left and right; it is no longer shoulder to shoulder; it is God for us all! Under tree-trunks, among rocks, stumbling over the dead, struggling with the living, facing the steady fire of eight thousand infantry, they wrestle with the Ridge. . . . Things

are growing desperate up aloft; the rebels tumble rocks upon the rising line; they light the fuses and roll shells down the steep; they load the guns with handfuls of cartridges in their haste; and as if there were powder in the word, they shout 'Chickamauga' down upon the mounters. But it would not all do, and just as the sun, weary of the scene, was sinking out of sight, with magnificent burst all along the line, the advance surged over the crest, and in a minute those flags fluttered along the fringe where fifty rebel guns were kennelled. . . . Men flung themselves exhausted upon the ground. They laughed and wept, shook hands, embraced; turned round, and did all four over again. It was as wild as a carnival."

Grant had given the order for taking the first line of rifle-pits only, but the men, first one regiment and then another, swept up the hill, determined to be the first to plant the colors there. "When I saw those flags go up," said Sheridan afterward, "I knew we should carry the ridge, and I took the responsibility." Sheridan's horse was shot under him, after which he led the assault on foot. Over twelve hundred men made Missionary Ridge sacred to liberty by their blood.

All seemed heroes on that day. One poor fellow, with his shoulder shattered, lay beside a rock. Two comrades halted to bear him to the rear, when he said, "Don't stop for me; I'm of no account; for GOD's sake, push right up with the boys!" and on they went, to help scale the mountain.

When the men were going up the hill, Grant asked by whose orders that was done? "It is all right if it turns out all right," he said; "but if not, some one will suffer." But it turned out all right, and Grant knew thereafter how fully he could trust Sheridan.

The following spring Sheridan was placed by Grant

in command of the cavalry of the Army of the Potomac, numbering nearly twelve thousand men. Here he was to add to his fame in the great battles of the Shenandoah Valley. From May to August Sheridan lost over five thousand men in killed and wounded, in smaller battles as he protected Grant's flank while he moved his forces to the James River, or in cutting off Lee's supplies. Meantime General Early had been spreading terror by his attempt to take Washington, thus hoping also to withdraw Grant's attention from Lee at Richmond.

The time had come for decisive action. Grant's orders were, "Put yourself south of the enemy and follow him to the death. I feel every confidence that you will do the best, and will leave you as far as possible to act on your own judgment, and not embarrass you with orders and instructions." About the middle of September Grant visited Sheridan with a plan of battle for him in his pocket, but he said afterward, "I saw that there were but two words of instruction necessary, 'Go in.' The result was such that I have never since deemed it necessary to visit General Sheridan before giving him orders."

The battle of Opequan was fought Sept. 19, 1864, Early being completely routed and losing about four thousand men, five pieces of artillery, and nine army flags, with an equal loss of men by the Federals. The fight was a bitter one from morning till evening, a regiment like the One Hundred and Fourteenth New York going into the battle with one hundred and eighty men, and coming out with forty, their dead piled one above another! Sheridan at first stood a little to the rear, so that he might calmly direct the battle; but at last, swinging his sword, and exclaiming, "I can't stand this!" he rode into the conflict. The next day he telegraphed to Edwin M. Stanton, Secretary of War, "We have just

sent them whirling through Winchester, and we are after them to-morrow. This army behaved splendidly."

This battle quickened the hope and courage of the North, who began to see the end of the devastating war. "Whirling through Winchester" was reported all over the land. Abraham Lincoln telegraphed, "Have just heard of your great victory. God bless you all, officers and men! Strongly inclined to come up and see you." Grant ordered each of his two Richmond armies to fire a salute of one hundred guns.

The next day Sheridan passed on after Early, and gave battle at Fisher's Hill, the Confederates losing sixteen guns and eleven hundred prisoners, besides killed and wounded. Many of these belonged to Stonewall Jackson's corps, and were the flower of the Southern army. "Keep on," said Grant, "and your good work will cause the fall of Richmond." Secretary Stanton ordered one hundred guns to be fired by various generals, fifteen hundred guns in all, for Fisher's Hill. Early was now so thoroughly beaten, that the Richmond mob wrote on the guns forwarded to him by the South the satirical sentence, "General Sheridan, care of General Early!" Grant's orders were now to lay waste the valley, so that Lee might have no base of supplies. Over two thousand barns filled with grain, over seventy mills, besides bridges and railroads were burned, and seven thousand cattle and sheep appropriated by the Union army. Such destruction seemed pitiful, but if the war was thereby shortened, as it doubtless was, then the saving of bloodshed was a blessing.

Then Sheridan was summoned to Washington for consultation. Early, learning his absence, and having been reinforced by twelve thousand troops, decided at once to give battle at Cedar Creek. His army marched at midnight, canteens being left in camp, lest they make

a noise. At daybreak, Oct. 19, with the well-known "rebel yell" the enemy rushed upon the sleeping camps of the Union army. Nearly a thousand of our men were taken prisoners, and eighteen guns. A panic ensued, and in utter confusion, though there was some brave fighting, our troops fell back to the rear. Sheridan, on his way from Washington, had slept at Winchester that night, twenty miles away. At nine o'clock he rode out of the town on his splendid black horse, unconscious of danger to his army. Soon the sound of battle was heard, and not a mile away he met the fugitives. He at once ordered some troops to stop the stragglers, and rushed on to the front as swiftly as his foaming steed could carry him, swinging his hat, and shouting, "Face the other way, boys! face the other way! If I had been here, boys, this never should have happened." Meeting a colonel who said, "The army is whipped," he replied, "You are, but the army isn't!"

Rude breastworks of stones, rocks, and trees were thrown up. Then came desperate fighting, and then the triumphant charge. The first line was carried, and then the second, Sheridan leading a brigade in person. Early's army was thoroughly routed. The captured guns were all retaken, besides twenty-four pieces of artillery and sixteen hundred prisoners. Early reported eighteen hundred killed and wounded.

Again the whole North rejoiced over this victory. Sheridan was made a major-general in the regular army "for the personal gallantry, military skill and just confidence in the courage and gallantry of your troops displayed by you on the 19th day of October at Cedar Run," said Lincoln, "whereby, under the blessing of Providence, your routed army was reorganized, a great national disaster averted, and a brilliant victory achieved over the rebels for the third time in pitched battle within

thirty days." General Grant wrote from City Point, "Turning what bid fair to be a disaster into a glorious victory stamps Sheridan what I always thought him, one of the ablest of generals."

Well wrote Thomas Buchanan Read in that immortal poem, "Sheridan's Ride":—

"Hurrah! hurrah for Sheridan!
Hurrah! hurrah for horse and man!
And when their statues are placed on high,
Under the dome of the Union sky,
The American soldier's Temple of Fame,
There with the glorious General's name,
Be it said in letters both bold and bright,
'Here is the steed that saved the day,
By carrying Sheridan into the fight
From Winchester, twenty miles away!'"

"In eleven weeks," says General Adam Badeau, "Sheridan had taken thirteen thousand prisoners, forty-nine battle flags, and sixty guns, besides recapturing eighteen cannon at Cedar Creek. He must besides have killed and wounded at least nine thousand men, so that he destroyed for the enemy twenty-two thousand soldiers."

And now the only work remaining was to join Grant at Richmond in his capture of Lee. He had passed the winter near Winchester, and now having crossed the James River, April 1, 1865, was attacked by General Pickett at Five Forks. After a severe engagement, about five thousand prisoners were taken by Sheridan, with thirteen colors and six guns. His magnetic influence over his men is shown by an incident narrated by General Badeau. "At the battle of Five Forks, a soldier, wounded under his eyes, stumbled and was fall-

ing to the rear, but Sheridan cried, 'Never mind, my man; there's no harm done!' and the soldier went on with a bullet in his brain, till he dropped dead on the field."

From here he pushed on to Appomattox Court House, where he headed Lee's army, and waited for Grant to come up. Richmond had surrendered to Grant on the morning of April 3. On the 7th of April Grant wrote to Lee, "The result of the last week must convince you of the hopelessness of further resistance on the part of the Army of Northern Virginia in this struggle. I feel that it is so, and regard it as my duty to shift from myself the responsibility of any further effusion of blood, by asking you to surrender that portion of the Confederate States Army known as the Army of Northern Virginia." Lee replied, "Though not entertaining the opinion you express on the hopelessness of further resistance on the part of the Army of Northern Virginia, I reciprocate your desire to avoid useless effusion of blood, and therefore, before considering your proposition, ask the terms you will offer on condition of its surrender." The reply was the only one that could be given. "The terms upon which peace can be had are well understood. By the South laying down their arms they will hasten that most desirable event, save thousands of human lives, and hundreds of millions of property not yet destroyed."

At one o'clock, April 9, 1865, the two able generals met, and at four it was announced that the Army of Northern Virginia, with over twenty-eight thousand men, had surrendered to the Army of the Potomac. Memorable day! that brought peace to a nation tired of the horrors of war.

In July of that year Sheridan assumed command of the Military Division of the Gulf. Ten years later, June 3, 1875, when he was forty-four years old, he married

Miss Irene Rucker, the daughter of General D. H. Rucker, for years his friend. She was a fine linguist, and a charming woman. Their home was made in Chicago.

Sheridan was made Lieutenant-General, March 4, 1869, and when General Sherman retired from the position of Commander-in-Chief of the Army, Nov. 1, 1883, Sheridan moved to Washington, to take his place.

General Sheridan was taken ill of heart disease about the middle of May, 1888. After an illness of three months, he died at Nonquitt, Mass., near the ocean, on the evening of August 5. After lying in state at Washington, his body was buried with military honors in the national cemetery at Arlington.

DWIGHT L. MOODY

"THERE'S no chance to get in there. There's six thousand persons inside, and two thousand outside."

This was said to Dr. Magoun, President of Iowa College, and myself, after we had waited for nearly an hour, outside of Spurgeon's Tabernacle, in London, in the hope of hearing Mr. Moody preach. Finally, probably through courtesy to Americans, we obtained seats. The six thousand in this great church were sitting as though spellbound. The speaker was a man in middle life, rugged, strong, and plain in dress and manner. His words were so simple that a child could understand them. Now tears came into the eyes of most of the audience, as he told some touching incident, and now faces grew sober as the people examined their own hearts under the searching words. There was no consciousness about the preacher; no wild gesture nor loud tone. Only one expression seemed applicable, "a man dead in earnest."

And who was this man whom thousands came to hear? Not a learned man, not a rich man, but one of the greatest evangelists the world has ever seen. Circumstances were all against him, but he conquered circumstances.

Dwight Lyman Moody was born at Northfield, Mass., Feb. 5, 1837. His father, a stone-mason and farmer, died when the boy was four years old, broken down with reverses in business. His mother was left with seven sons and two daughters, the eldest a boy only fifteen.

What happened to this lad has been well told by Mr. Moody.

“Soon after my father’s death the creditors came in and took everything. One calamity after another swept over the entire household. Twins were added to the family, and my mother was taken sick. To the eldest boy my mother looked as a stay in her calamity; but all at once that boy became a wanderer. He had been reading some of the trashy novels, and the belief had seized him that he had only to go away, to make a fortune. Away he went. I can remember how eagerly she used to look for tidings of that boy; how she used to send us to the post-office to see if there was a letter from him, and recollect how we used to come back with the sad news, ‘No letter!’ I remember how in the evenings we used to sit beside her in that New England home, and we would talk about our father; but the moment the name of that boy was mentioned she would hush us into silence. Some nights, when the wind was very high, and the house, which was upon a hill, would tremble at every gust, the voice of my mother was raised in prayer for that wanderer, who had treated her so unkindly. I used to think she loved him better than all of us put together, and I believe she did.

“On a Thanksgiving day she used to set a chair for him, thinking he would return home. Her family grew up, and her boys left home. When I got so that I could write, I sent letters all over the country, but could find no trace of him. One day, while in Boston, the news reached me that he had returned. While in that city, I remember how I used to look for him in every store—he had a mark on his face—but I never got any trace. One day, while my mother was sitting at the door, a stranger was seen coming toward the house, and when he came to the door he stopped. My mother didn’t

know her boy. He stood there with folded arms and great beard flowing down his breast, his tears trickling down his face. When my mother saw those tears, she cried, 'Oh, it's my lost son!' and entreated him to come in. But he stood still, 'No, mother,' he said, 'I will not come in until I hear that you have forgiven me.' She rushed to the threshold, threw her arms around him, and breathed forgiveness."

Dwight grew to be a strong, self-willed lad, working on the farm, fond of fun rather than of study, held in check only by his devotion to his mother. She was urged to put the children into different homes, on account of their extreme poverty, but by tilling their garden, and doing some work for their neighbors, she managed to keep her little flock together. A woman who could do this had remarkable energy and courage.

What little schooling Dwight received was not greatly enjoyed because the teacher was a quick-tempered man, who used a rattan on the boys' backs. Years after, he told how a happy change was effected in that school. "After a while there was somebody who began to get up a movement in favor of controlling the school by love. I remember how we thought of the good time we should have that winter, when the rattan would be out of school. We thought we would then have all the fun we wanted. I remember who the teacher was—a lady—and she opened the school with prayer. We hadn't seen it done before, and we were impressed, especially when she prayed that she might have grace and strength to rule the school with love. The school went on several weeks, and we saw no rattan; but at last the rules were broken, and I think I was the first boy to break them. She told me to wait till after school, and then she would see me. I thought the rattan was coming out sure, and stretched myself up in

warlike attitude. After school, however, she sat down by me and told me how she loved me, and how she had prayed to be able to rule that school by love, and concluded by saying, 'I want to ask you one favor, that is, if you love me, try to be a good boy'; and I never gave her trouble again."

He was very susceptible to kindness. When an old man, who had the habit of giving every new boy who came into the town a cent, put his hand on Dwight's head, and told him he had a Father in heaven, he never forgot the pressure of that old man's hand.

Farming among Northfield rocks was not exciting work enough for the energetic boy; so with his mother's consent, he started for Boston, when he was seventeen, to look for work. He had the same bitter experience that other homeless boys have. He says, "I went to the post-office two or three times a day to see if there was a letter for me. I knew there was not, as there was but one mail a day. I had not any employment and was very homesick, and so went constantly to the post-office, thinking perhaps when the mail did come in, my letter had been mislaid. At last, however, I got a letter. It was from my youngest sister,—the first letter she ever wrote me. I opened it with a light heart thinking there was some good news from home, but the burden of the whole letter was that she had heard there were pickpockets in Boston, and warned me to take care of them. I thought I had better get some money in hand first, and then I might take care of pickpockets."

The homesick boy finally applied to an uncle, a shoe-dealer, who hesitated much about taking the country lad into his employ. He agreed to do so on the conditions that the boy would heed his advice, and attend regularly the Mount Vernon Church and Sunday-school. The preaching of Dr. Kirk, the pastor, was scholarly and

eloquent, but quite above the lad's comprehension. His Sunday-school teacher, Mr. Edward Kimball, was a devoted man, and withal had the tact to win a boy's confidence. One day he came into the store where young Moody worked, and going behind the counter, placed his hand on the boy's shoulder and talked about his becoming a Christian. Such interest touched Dwight's heart, and he soon took a stand on the right side. Years afterward, Moody was the means of the conversion of the son of Mr. Kimball, at seventeen, just his own age at this time.

His earnest nature made him eager to do Christian work; but so poor was his command of language, and his sentences were so awkward, that he was not accepted to the membership of the church for a year after he had made his application. They thought him very "unlikely ever to become a Christian of clear and decided views of gospel truth; still less to fill any extended sphere of public usefulness." Alas! how the best of us sometimes have our eyes shut to the treasures lying at our feet.

He longed for a wider field of usefulness, and in the fall of 1856, when he was nineteen, started for Chicago, taking with him testimonials which secured him a place as salesman in a shoe store. He joined Plymouth Church, and at once rented four pews for the young men whom he intended to bring in. Here, it is said, some of the more cultured assured him that his silence would be more effective for good than his speech! Certainly not encouraging to a young convert.

He offered his services to a mission school as a teacher. "He was welcome, if he would bring his own scholars," they said. The next Sunday, to their astonishment, young Moody walked in at the head of eighteen ragged urchins whom he had gathered from the streets. He distributed tracts among the seamen at the wharfs, and

did not fear to go into saloons and talk with the inmates.

Finally he wanted a larger field still, and opened an old saloon, which had been vacated, as a Sunday-school room. It was in the neighborhood of two hundred saloons and gambling-dens. His heart was full of love for the poor and the outcasts, and they did not mind about his grammar. A friend came to see him in these dingy quarters, and found him holding a colored child, while he read, by the dim light of some tallow candles, the story of the Prodigal Son to his little congregation. "I have got only one talent," said the unassuming Moody. "I have no education, but I love the Lord Jesus Christ, and I want to do something for him. I want you to pray for me."

Thirteen years later, when all Great Britain was aflame with the sermons of this same man, he wrote his friend, "Pray for me every day; pray now that the Lord will keep me humble."

Soon the Sunday-school outgrew the shabby saloon, and was moved to a hall, where a thousand scholars gathered. Still attending to business as a travelling salesman, for six years he swept and made ready his Sunday-school room. He had great tact with his pupils, and won them by kindness. One day a boy came, who was very unruly, sticking pins into the backs of the other boys. Mr. Moody patted him kindly on the head, and asked him to come again. After a short time he became a Christian, and then was anxious about his mother, whom Mr. Moody had been unable to influence. One night the lad threw his arms about her neck, and weeping told her how he had stopped swearing, and how he wanted her to love the Saviour. When she passed his room, she heard him praying, "Oh, God, convert my dear mother." The next Sunday he led her into the Sabbath-school, and she became an earnest worker.

He also has great tact with his young converts. "Every man can do something," he said. "I had a Swede converted in Chicago. I don't know how. I don't suppose he was converted by my sermons, because he couldn't understand much. The Lord converted him into one of the happiest men you ever saw. His face shone all over. He came to me, and he had to speak through an interpreter. This interpreter said this Swede wanted to have me give him something to do. I said to myself, 'What in the world will I set this man to doing? He can't talk English! So I gave him a bundle of little handbills, and put him out on the corner of the greatest thoroughfare of Chicago, and let him give them out, inviting people to come up and hear me preach. A man would come along and take it, and see 'Gospel meeting,' and would turn around and curse the fellow; but the Swede would laugh, because he didn't know but he was blessing him. He couldn't tell the difference. A great many men were impressed by that man's being so polite and kind. There he stood, and when winter came and the nights got so dark they could not read those little handbills, he went and got a little transparency and put it up on the corner, and there he took his stand, hot or cold, rain or shine. Many a man was won to Christ by his efforts.

In 1860, when Moody was twenty-three, he made up his mind to give all his time to Christian work. He was led to this by the following incident. He says, "In the Sunday-school I had a pale, delicate young man as one of the teachers. I knew his burning piety, and assigned him to the worst class in the school. They were all girls, and it was an awful class. They kept gadding around in the school-room, and were laughing and carrying on all the while. One Sunday he was absent, and I tried myself to teach the class, but couldn't do anything

with them; they seemed farther off than ever from any concern about their souls. Well, the day after his absence, early Monday morning, the young man came into the store where I worked, and, tottering and bloodless, threw himself down on some boxes.

“‘What’s the matter?’ I asked.

“‘I have been bleeding at the lungs, and they have given me up to die,’ he said.

“‘But you are not afraid to die?’ I questioned.

“‘No,’ said he, ‘I am not afraid to die; but I have got to stand before God and give an account of my stewardship, and not one of my Sabbath-school scholars has been brought to Jesus. I have failed to bring one, and haven’t any strength to do it now.’

“He was so weighed down that I got a carriage and took that dying man in it, and we called at the homes of every one of his scholars, and to each one he said, as best his faint voice would let him, ‘I have come to just ask you to come to the Saviour,’ and then he prayed as I never heard before. And for ten days he labored in that way, sometimes walking to the nearest houses. And at the end of that ten days, every one of that large class had yielded to the Saviour.

“Full well I remember the night before he went away (for the doctors said he must hurry to the South); how we held a true love-feast. It was the very gate of heaven, that meeting. He prayed, and they prayed; he didn’t ask them, he didn’t think they could pray; and then we sung, ‘Blest be the tie that binds.’ It was a beautiful night in June that he left on the Michigan Southern, and I was down to the train to help him off. And those girls every one gathered there again, all unknown to each other; and the depot seemed a second gate to heaven, in the joyful, yet tearful, communion and farewells between these newly-redeemed souls and him

whose crown of rejoicing it will be that he led them to Jesus. At last the gong sounded, and, supported on the platform, the dying man shook hands with each one, and whispered, 'I will meet you yonder.'

"From this," said Mr. Moody, "I got the first impulse to work solely for the conversion of men."

When he told his employer that he was going to give up business, he was asked, "Where will you get your support?"

"God will provide for me if he wishes me to keep on, and I shall keep on till I am obliged to stop," was the reply.

To keep his expenses as low as possible, he slept at night on a hard bench in the rooms of the Young Men's Christian Association, and ate the plainest food. Thus was the devoted work of this Christian hero begun. He was soon made city missionary for a time. Then the Civil War began, and a camp was established near Chicago. He saw his wonderful opportunity now to reach men who were soon to be face to face with death. The first tent erected was used as a place of prayer. Ministers and friends came to his aid. He labored day and night, sometimes eight or ten prayer-meetings being held at the same time in the various tents.

He did not desert these men on the field of battle. He was with the army at Pittsburgh Landing, Shiloh, Murfreesboro', and Chattanooga. Nine times, in the interests of the Christian Commission, he visited the men at the front, on his errands of mercy. He tells this incident in a hospital at Murfreesboro'.

"One night after midnight, I was waked up and told that there was a man in one of the wards who wanted to see me. I went to him, and he called me 'chaplain,'—I wasn't a chaplain,—and he said he wanted me to help him die. And I said, 'I'd take you right up in my

arms and carry you into the kingdom of God, if I could; but I can't do it; I can't help you to die.'

"And he said, 'Who can?'

"I said, 'The Lord Jesus Christ can. He came for that purpose.' He shook his head and said, 'He can't save me; I have sinned all my life.'

"And I said, 'But he came to save sinners.' I thought of his mother in the North, and I knew that she was anxious that he should die right, and I thought I'd stay with him. I prayed two or three times, and repeated all the promises I could, and I knew that in a few hours he would be gone. I said I wanted to read him a conversation that Christ had with a man who was anxious about his soul. I turned to the third chapter of John. His eyes were riveted on me, and when I came to the fourteenth and fifteenth verses, he caught up the words, 'As Moses lifted up the serpent in the wilderness, even so must the Son of man be lifted up: that whosoever believeth in him should not perish, but have eternal life.'

"He stopped me, and said, 'Is that there?' I said, 'Yes;' and he asked me to read it again, and I did so. He leaned his elbows on the cot and clasped his hands together, and said, 'That's good; won't you read it again?' I read it the third time, and then went on with the rest of the chapter. When I finished his eyes were closed, his hands were folded, and there was a smile on his face. Oh, how it was lit up! What a change had come over it. I saw his lips quiver, and I leaned over him, and heard in a faint whisper, 'As Moses lifted up the serpent in the wilderness, so must the Son of man be lifted up: that whosoever believeth on him should not perish, but have eternal life.'

"He opened his eyes and said, 'That's enough; don't read any more.' He lingered a few hours, and then pillowed his head on those two verses, and went up in

one of Christ's chariots and took his seat in the kingdom of God."

On the 28th of August, 1862, Mr. Moody married Miss Emma C. Revell, a most helpful assistant in his meetings, and a young lady of noble character. A daughter and a son came to gladden their simple cottage, and there was no happier home in all Chicago. One morning he said to his wife, "I have no money, and the house is without supplies. It looks as if the Lord had had enough of me in this mission work, and is going to send me back again to sell boots and shoes." But very soon two checks came, one of fifty dollars for himself, and another for his school. Six years after his marriage, his friends gave him the lease of a pleasant furnished house.

This home had a welcome for all who sought the true way to live. One day a gentleman called at the office, bringing a young man who had recently come out of the penitentiary. The latter shrunk from going into the office, but Mr. Moody said, "Bring him in." Mr. Moody took him by the hand, told him he was glad to see him, and invited him to his house. When the young man called, Mr. Moody introduced him as his friend. When his little daughter came into the room, he said, "Emma, this is papa's friend." She went up and kissed him, and the man sobbed aloud.

When she left the room, Mr. Moody said, "What is the matter?"

"Oh sir," was the reply, "I have not had a kiss for years. The last kiss I had was from my mother, and she was dying. I thought I would never have another kiss again."

No wonder people are saved from sin by visiting a home like this!

In 1863, those who had been converted under this be-

loved leader wanted a church of their own where they could worship together. A building was erected, costing twenty thousand dollars. Four years later, Mr. Moody was made President of the Young Men's Christian Association, and Farwell Hall was speedily built.

He was loved and honored everywhere. Once he was invited to the opening of a great billiard hall. He saw the owners, and asked if he might bring a friend. They said yes, but asked who he was. Mr. Moody said it wasn't necessary to tell, but he never went without him. They understood his meaning, and said, "Come, we don't want any praying."

"You've given me an invitation, and I am going to come," he replied.

"But if you come, you needn't pray."

"Well, I'll tell you what we'll do," was the answer; "we'll compromise the matter, and if you don't want me to come and pray for you when you open, let me pray for you both now," to which they agreed.

Mr. Moody prayed that their business might go to pieces, which it did in a very few months. After the failure, one of the partners determined to kill himself; but when he was about to plunge the knife into his breast, he seemed to hear again the words of his dying mother, "Johnny, if you get into trouble, pray." That voice changed his purpose and his life. He prayed for forgiveness and obtained it.

In 1871, the terrible fire in Chicago swept away Moody's home and church. Two years later, having been invited to Great Britain by two prominent Christian men, he decided to take his friend, Mr. Ira D. Sankey, who had already won a place in the hearts of the people by his singing, and together they would attempt some work for their Lord. They landed in Liverpool, June 17. The two friends who had invited them were dead.

The clergy did not know them, and the world was wholly indifferent. At their first meeting in York, England, only four persons were present, but Mr. Moody said it was one of the best meetings they ever held. They labored here for some weeks, and about two hundred were converted.

From here they went to Sunderland and Newcastle, the numbers and interest constantly increasing. Union prayer meetings had been held in Edinburgh for two months in anticipation of their coming. When they arrived, two thousand persons crowded Music Hall, and hundreds were necessarily turned away. As a result of these efforts, over three thousand persons united with the various churches. In Dundee over ten thousand persons gathered in the open air, and at Glasgow nearly thirty thousand, Mr. Moody preaching from his carriage. The press reported all these sermons, and his congregations were thus increased a hundredfold all over the country. The farmer boy of Northfield, the awkward young convert of Mount Vernon Church, Boston, had become famous. Scholarly ministers came to him to learn how to influence men toward religion. Infidels were reclaimed, and rich and poor alike found the Bible precious, from his simple and beautiful teaching.

In Ireland the crowds sometimes covered six acres, and inquiry meetings lasted for eight hours. Four months were spent in London, where it is believed over two and a half million persons attended the meetings.

Mr. Moody had been fearless in his work. When a church member who was a distiller became troubled in conscience over his business, he came and asked if the evangelist thought a man could not be an honest distiller.

Mr. Moody replied, "You should do whatever you do for the glory of God. If you can get down and pray about a barrel of whiskey, and say when you sell it, 'O

Lord God, let this whiskey be blessed to the world,' it is probably honest!"

On his return to America, Mr. Moody was eagerly welcomed. Philadelphia utilized an immense freight depot for the meetings, putting in it ten thousand chairs, and providing a choir of six hundred singers. Over four thousand conversions resulted. In New York the Hippodrome was prepared by an expenditure of ten thousand dollars, and as many conversions were reported here. Boston received him with open arms. Ninety churches co-operated in the house-to-house visitation in connection with the meetings, and a choir of two thousand singers was provided. Mr. Moody, with his wonderful executive ability and genius in organizing, was like a general at the head of his army.

Chicago received him home thankfully and proudly, as was her right. A church had been built for him during his absence, costing one hundred thousand dollars.

For the remaining years of his life his work was a marvel to the world and, doubtless, to himself. Great Britain was a second time stirred to its centre by his presence. His sermons were scattered broadcast by the hundreds of thousands. He received no salary, never allowing a contribution to be taken for himself, but his wants were supplied. A pleasant home at his birthplace, Northfield, was given him by his friends, made doubly dear by the presence of his mother. He established two schools here, one for boys and another for girls, with three hundred pupils, trained in all that ennobles life.

The results from Mr. Moody's work are beyond computing. In his first visit to London a noted man of wealth was converted. He at once sold his hunting dogs and made his country house a centre of missionary effort. During Mr. Moody's second visit the two sons at Cambridge University professed Christianity. One went

to China, having induced some other students to accompany him as missionaries; the other, just married to a lord's daughter, began mission work among the slums in the East End of London.

Mr. Moody died at his home at East Northfield, Mass., at noon, Friday, December 22, 1899. He was taken ill during a series of meetings at Kansas City, a few weeks previously, and heart disease resulted from overwork. He was conscious to the last. He said to his two sons who were standing by his bedside: "I have always been an ambitious man, not ambitious to lay up wealth, but to leave you work to do, and you're going to continue the work of the schools in East Northfield and Mount Hermon and of the Chicago Bible Institute." Just as death came he awoke as if from sleep and said joyfully, "I have been within the gate; earth is receding; heaven is opening; God is calling me; do not call me back," and a moment later expired.

The work of such a life as Mr. Moody's goes on forever. His influence is still felt in countless homes. He wrought without means, and with no fortuitous circumstances. He was a man consecrated to a single purpose,—that of winning souls.

LEON GAMBETTA

ALTHOUGH having an Italian father, Gambetta is known to history as the brilliant, eloquent leader of the French people—the maker of the Republic.

Leon Gambetta was born at Cahors, April 2, 1838. His father was an Italian from Genoa, poor, and of good character; his mother, a French woman, singularly hopeful, energetic, and noble. They owned a little bazaar and grocery, and here, Onasie, the wife, day after day helped her husband to earn a comfortable living. When their only son was seven years old, he was sent to a Jesuits' preparatory school at Monfaucon, his parents hoping that he would become a priest. His mother had great pride in him, and faith in his future. She taught him how to read from the *National*, a newspaper founded by Thiers, republican in its tendencies. She saw with delight that when very young he would learn the speeches of Thiers and Guizot, which he found in its columns, and declaim them as he roamed alone the narrow streets, and by the quaint old bridges and towers of Cahors. At Monfaucon, he gave his orations before the other children, the mother sending him the much-prized *National* whenever he obtained good marks, and the Jesuits, whether pleased or not, did not interfere with their boyish republican.

At eight years of age an unfortunate accident happened which bade fair to ruin his hopes. While watching a cutter drill the handle of a knife, the foil broke, and a piece entered his right eye, spoiling the sight. Twenty

years afterward, when the left, through sympathy, seemed to be nearly destroyed, a glass eye was inserted, and the remaining one was saved.

When Leon was ten years old, the Revolution of 1848 deposed Louis Philippe, the Orleanist, and Louis Napoleon was made President of the Republic. Perhaps the people ought to have known that no presidency would long satisfy the ambition of a Bonaparte. He at once began to increase his power by winning the Catholic Church to his side. The Jesuits no longer allowed the boy Leon to talk republicanism; they saw that it was doomed. They scolded him, whipped him, took away the *National*, and finally expelled him, writing to his parents, "You will never make a priest of him; he has an utterly undisciplinable character."

The father frowned when he returned home, and the neighbors prophesied that he would end his life in the prison for holding such radical opinions. The poor mother blamed herself for putting the *National* into his hands, and thus bringing all this trouble upon him. Ah, she wrought better than she knew! But for the *National*, and Gambetta's unconquerable love for a republic, France might to-day be the plaything of an emperor.

Meantime, Louis Napoleon was putting his friends into office, making tours about the country to win adherents, and securing the army and the police to his side. At seven o'clock, on the morning of December 2, 1851, the famous coup d'état came, and the unscrupulous President had made himself Emperor. Nearly two hundred and fifty deputies were arrested and imprisoned, and the Republicans who opposed the usurpation were quickly subdued by the army. Then the French were graciously permitted to say, by ballot, whether they were willing to accept the empire. There was, of course, but one

judicious way to vote, and that was in the affirmative, and they thus voted.

Joseph Gambetta, the father, saw the political storm which was coming, and fearing for his outspoken son, locked him up in a lyceum at Cahors, till he was seventeen. Here he attracted the notice of his teachers by his fondness for reading, his great memory, and his love of history and politics. At sixteen he had read the Latin authors, and the economical works of Proudhon. When he came home, his father told him that he must now become a grocer, and succeed to the business. He obeyed, but his studious mind had no interest in the work. "He recoiled from spending his powers in persuading the mayor's wife that a yard of Genoa velvet at twenty francs was cheaper than the same measure of the Lyons article at thirteen. So tired and sick of the business did he become, that he begged his father to be allowed to keep the accounts, which he did in a neat, delicate hand.

His watchful mother saw that her boy's health was failing. He was restless and miserable. He longed to go to Paris to study law, and then teach in some provincial town. He planned ways of escape from the hated tasks, but he had no money, and no friends in the great city.

But his mother planned to some purpose. She said to M. Menier, the chocolate-maker, "I have a son of great promise, whom I want to send to Paris against his father's will to study law. He is a good lad, and no fool. But my husband, who wants him to continue his business here, will, I know, try to starve him into submission. What I am about to propose is that if I buy your chocolate at the rate you offer it, and buy it outright instead of taking it to sell on commission, will you say nothing if I enter it on the book at a higher price, and you pay the difference to my son?" Menier, interested to have the boy prosper, quickly agreed.

After a time, she called her son aside and, placing a bag of money in his hand, said, "This, my boy, is to pay your way for a year. A trunk full of clothes is ready for you. Try to come home somebody. Start soon, and take care to let nobody suspect you are going away. Do not say good-bye to a single soul. I want to avoid a scene between you and your father."

Ambition welled up again in his heart, and the bright expression came back into his face. The next morning he slipped away, and was soon at Paris. He drove to the Sorbonne, because he had heard that lectures were given there. The cabdriver recommended a cheap hotel close by, and, obtaining a room in the garret, the youth, not yet eighteen, began his studies. He rose early and worked hard, attending lectures at the medical school as well as at the law, buying his books at second-hand shops along the streets. Though poverty often pinched him as to food, and his clothes were poor, he did not mind it, but bent all his energies to his work. His mother wrote how angered the father was at his leaving, and would not allow his name to be mentioned in his presence. Poor Joseph! how limited was his horizon.

Leon's intelligence and originality won the esteem of the professors, and one of them said, "Your father acts stupidly. You have a true vocation. Follow it. But go to the bar, where your voice, which is one in a thousand, will carry you on, study and intelligence aiding. The lecture-room is a narrow theatre. If you like, I will write to your father to tell him what my opinion of you is."

Professor Valette wrote to Joseph Gambetta, "The best investment you ever made would be to spend what money you can afford to divert from your business in helping your son to become an advocate."

The letter caused a sensation in the Gambetta family.

The mother took courage and urged the case of her darling child, while her sister, Jenny Massabie, talked ardently for her bright nephew. An allowance was finally made. In two years Leon had mastered the civil, criminal, military, forest, and maritime codes. Too young to be admitted to the bar to plead, for nearly a year he studied Paris, its treasures of art, and its varied life. It opened a new and grand world to him. Accidentally he made the acquaintance of the head usher at the Corps Legislatif, who said to the young student, "You are an excellent fellow, and I should like to oblige you; so if the debates of the Corps Legislatif interest you, come there and ask for me, and I will find you a corner in the galleries where you can hear and see everything." Here Leon studied parliamentary usage, and saw the repression of thought under an empire. At the Café Procope, once the resort of Voltaire, Diderot, Rousseau, and other literary celebrities, the young man talked over the speeches he had heard, with his acquaintances, and told what he would do if he were in the House. An improbable thing it seemed that a poor and unknown lad would ever sit in the Corps Legislatif, as one of its members! He organized a club for reading and debating, and was of course made its head. It could not be other than republican in sentiment.

In 1860, at the age of twenty-two, Gambetta was admitted to the bar. The father was greatly opposed to his living in Paris, where he thought there was no chance for a lawyer who had neither money nor influential friends, and urged his returning to Cahors. Again his Aunt Jenny, whom he always affectionately called "Tata," took his part. Having an income of five hundred dollars a year, she said to the father, "You do not see how you can help your son in Paris, it may be for long years; but

next week I will go with him, and we shall stay together;" and then, turning to her nephew, she added, "And now, my boy, I will give you food and shelter, and you will do the rest by your work."

They took a small house in the Latin Quartier, very plain and comfortless. His first brief came after waiting eighteen months! Grepps, a deputy, being accused of conspiracy against the Government, Gambetta defended him so well that Crémieux, a prominent lawyer, asked him to become his secretary. The case was not reported in the papers, and was therefore known only by a limited circle. For six years the brilliant young scholar was virtually chained to his desk. The only recreation was an occasional gathering of a few newspaper men at his rooms, for whom his aunt cooked the supper, willing and glad to do the work, because she believed he would some day come to renown from his genius.

Finally his hour came. At the coup d'état, Dr. Baudin, a deputy, for defending the rights of the National Assembly, was shot on a barricade. On All-Soul's Day, 1868, the Republicans, to the number of a thousand, gathered at the grave in the cemetery of Montmartre, to lay flowers upon it and listen to addresses. The Emperor could not but see that such demonstrations would do harm to his throne. Dellschuzes, the leader, was therefore arrested, and chose the unknown lawyer, Gambetta, to defend him. He was a strong radical, and he asked only one favor of his lawyer, that he would "hit hard the Man of December," as those who hated the coup d'état of December 2, loved to call Louis Napoleon.

Gambetta was equal to the occasion. He likened the Emperor to Cataline, declaring that as a highwayman, he had taken France and felled her senseless. "For seventeen years," he said, "you have been masters of France,

and you have never dared to celebrate the Second of December. It is we who take up the anniversary, which you no more dare face than a fear-haunted murderer can his victim's corpse." When finally, overcome with emotion, Gambetta sank into his seat at the close of his speech, the die was cast. He had become famous from one end of France to the other, and the Empire had received a blow from which it never recovered. That night at the clubs, and in the press offices, the name of Leon Gambetta was on every lip.

It is not strange that in the elections of the following year, he was asked to represent Belleville and Marseilles, and chose the latter, saying to his constituents that he was in "irreconcilable opposition to the Empire." He at once became the leader of a new party, the "Irreconcilables," and Napoleon's downfall became from that hour only a question of time. Gambetta spoke everywhere, and was soon conceded to be the finest orator in France. Worn in body, by the confinement of the secretaryship, and the political campaign, he repaired to Ems for a short time, where he met Bismarck. "He will go far," said the Man of Iron. "I pity the Emperor for having such an irreconcilable enemy." The *National*, under Madam Gambetta's teaching in childhood, was bearing fruit.

Napoleon saw that something must be done to make his throne more stable in the hearts of his people. He attempted a more liberal policy, with Émile Ollivier at the head of affairs. But Gambetta was still irreconcilable, saying in one of his great speeches, "We accept you and your Constitutionalism as a bridge to the Republic, but nothing more." At last war was declared against Prussia, as much with the hope of promoting peace at home as to win honors in Germany. Everybody knows the rapid and crushing defeat of the French, and the fall of Napoleon at Sedan, September 2, when he wrote to



LEON GAMBETTA.



King William of Prussia, "Not having been able to die at the head of my troops, I can only resign my sword into the hands of your Majesty."

When the news reached Paris on the following day, the people were frantic. Had the Emperor returned, a defeated man, he could never have reached the Tuileries alive. Crowds gathered in the streets, and forced their way into the hall of the Corps Legislatif. Then the eloquent leader of the Republican ranks, scarcely heard of two years before, ascended the Tribune, and declared that, "Louis Napoleon Bonaparte and his dynasty have forever ceased to reign over France." With Jules Favre, Ferry, Simon, and others, he hastened to the Hotel de Ville, writing on slips of paper, and throwing out to the multitude, the names of those who were to be the heads of the provisional government. Cool, fearless, heroic, Gambetta stood at the summit of power, and controlled the people. They believed in him because he believed in the Republic.

Meantime the German armies were marching on Paris. The people fortified their city, and prepared to die if need be, in their homes. Before Paris was cut off from the outside world by the siege, part of the governing force retired to Tours. It became necessary for Gambetta, in October, to visit this city for conference, and to accomplish this he started in a balloon, which was just grazed by the Prussian guns as he passed over the lines. It was a hazardous step; but the balloon landed in a forest near Amiens, and he was safe. When he arrived in Tours there was not a soldier in the place; in a month, by superhuman energy, and the most consummate skill and wisdom, he had raised three armies of eight hundred thousand men, provided by loan for their maintenance, and directed their military operations. One of the prominent officers on the German side says, "This colossal energy

is the most remarkable event of modern history, and will carry down Gambetta's name to remote posterity."

He was now in reality the Dictator of France, at thirty-two years of age. He gave the fullest liberty to the press, had a pleasant "Bon jour, mon ami" for a workman, no matter how overwhelmed with cares he might be, and a self-possession, a quickness of decision, and an indomitable will that made him a master in every company and on every occasion. He electrified France by his speeches; he renewed her courage, and revived her patriotism. Even after the bloody defeat of Bazaine at Gravelotte, and his strange surrender of one hundred and seventy thousand men at Metz, Gambetta did not despair of France being able, at least, to demand an honorable peace.

But France had grown tired of battles. Paris had endured a siege of four months, and the people were nearly in a starving condition. The Communists, too, were demanding impossible things. Therefore, after seven months of war, the articles of peace were agreed upon, by which France gave to Germany fourteen hundred million dollars, to be paid in three years, and ceded to her the provinces of Alsace and Lorraine.

Gambetta could never bring himself to consent to these humiliating conditions, and on the day on which the terms were ratified, he and his colleagues from these two sections of the country, left the assembly together. Just as they were passing out, the venerable Jean Kuss, mayor of Strasburg, staggered up to Gambetta, saying, "Let me grasp your patriot's hand. It is the last time I shall shake it. My heart is broken. Promise to redeem brave Strasburg." He fell to the floor, and died almost immediately. Gambetta retired to Spain, till recalled by the elections of the following July.

He now began again his heroic labors, speaking all

through France, teaching the people the true principles of a republic; not communism, not lawlessness, but order, prudence, and self-government. He urged free, obligatory education, and the scattering of books, libraries, and institutes everywhere. When Thiers was made the first President, Gambetta was his most important and truest ally, though the former had called him "a furious fool"; so ready was the Great Republican to forgive harshness.

In 1877 he again saved his beloved Republic. The Monarchists had become restless, and finally displaced Thiers by Marshal MacMahon, a strong Romanist, and a man devoted to the Empire. It seemed evident that another coup d'état was meditated. Gambetta stirred the country to action. He declared that the President must "submit or resign," and for these words he was sentenced to three months' imprisonment and a fine of four hundred dollars, which sentence was never executed. MacMahon seeing that the Republic was stronger than he had supposed, soon after resigned his position, and was succeeded by M. Grevy. Gambetta was made President of the Assembly, and doubtless, if he had lived, would have been made President of the Republic.

There were not wanting those who claimed that he was ambitious for the supreme rule; but when death came from the accidental discharge of a pistol, producing a wound in the hand, all calumny was hushed, and France beheld her idol in his true light,—the incarnation of republicanism. Two hours before his death, at his plain home just out of Paris at Ville d'Avray, he said, "I am dying; there is no use in denying it; but I have suffered so much it will be a great deliverance." He longed to last till the New Year, but died five minutes before midnight, Dec. 31, 1882.

Circumstances helped to make the great orator, but he

also made circumstances. True, his opportunity came at the trial, after the Baudin demonstration, but he was ready for the opportunity. He had studied the history of an empire under the Cæsars, and he knew how republics are made and lost. When in the Corps Legislatif a leader was needed, he was ready, for he had carefully studied men. When at Tours he directed the military, he knew what he was doing, for he was conversant with the details of our Civil War. When others were sauntering for pleasure along the Champs Élysées, he had been poring over books in an attic opposite the Sorbonne. He died early, but he accomplished more than most men who live to be twice forty-five. When, in the years to come, imperialists shall strive again to wrest the government from the hands of the people, the name of Leon Gambetta will be an inspiration, a talisman of victory for the Republic.

JOHN D. ROCKEFELLER

To the world the very name of John D. Rockefeller personifies money. Without a near rival the wealthiest man in existence, he was looked upon as "the Shakespeare of business." And no matter what hue and cry may be raised against the very rich, we can but admire the splendid qualities which have contributed to his princely success. To be sure John D. Rockefeller himself modestly attributed much of the credit for the upbuilding of his giant corporation—The Standard Oil—and his ultimate colossal fortune to the many business associates who helped him in one capacity or another. Unquestionably these men did their full share, but there can be no doubt but that it was the guiding genius and unfaltering initiative of Rockefeller alone that outlined the course to be followed. It was his unfaltering zeal and wise foresight which put kerosene in the remotest sections of the Old World and gasoline where every motorist can buy it!

Starting life as a poor boy he built up a business that made him a billionaire. A dollar a second was the popular estimate of his income! And yet we are told that John D. Rockefeller never was interested in the mere getting of money! It was the battle, the joy of achievement, and later the necessity of just simply carrying on which held him! We can the more readily believe this by going back to the early days of his business career. At sixteen years of age we find him embarking as a clerk with a firm of commission merchants in Cleveland, Ohio. And, unbusinesslike and altogether unbelievable as it may seem in

the light of his later career, not one whit was said concerning the sum to be paid for his services! John D.'s whole energies were evidently bent on getting the job. That was in September, 1855; for the three months that intervened before the New Year, his employers paid him \$50. Thereafter he drew twelve checks for \$25 each. Then, the bookkeeper, who had been getting \$2000 a year, resigned, and the new clerk took his place at \$500 per annum. Here, he jogged along, giving satisfaction and scrupulously saving a part of each month's salary, until the end of the third year, when he mustered up "sand" enough to ask for \$800 per year. The firm offered him \$700, and John D. promptly got out!

A young friend, M. B. Clark, proposed that the two of them start a general commission business of their own. To do this, John D. would have to borrow \$1000. His father cheerfully advanced the money *at 10% interest*. But such was the enterprise of the new firm that shortly Rockefeller had not only paid his debt, but had established a bank credit, and was borrowing considerable sums. Indeed, in his memoirs, Mr. Rockefeller naively informs us that he was always a great borrower. Moreover, the world's records establishes the fact that all great capitalists are large borrowers. This is necessary to build new plants, to give employment to more workmen, to reduce the cost of production, and to put out more and better articles, and to speed up generally all the processes of business. For a growing industry opens up unlimited possibilities! It is fairly besieged with plans and propositions for exploiting all manner of ideas and inventions, and it gathers momentum and business bulk according to the wise application of these various schemes.

So it was with Clark & Rockefeller's commission business. For ten years the two partners succeeded beyond their wildest hopes, and then, convinced that there was a

great future in oil and its by-products, the company was enlarged and merged into the oil-refining business. There were several changes in the partnership, but Rockefeller clung. Indeed, his best friends maintained that he had "got into oil and couldn't get out." And there is a tale that this plunge was taken literally.

Mr. Rockefeller, it seems, had gone down into western Pennsylvania to investigate matters, when the discovery of oil there was first beginning to be noised about. He was met at Titusville by Mr. Breed, a miller with whom his commission firm had had considerable business. Breed had two saddle horses in waiting, and together the two set out on a twenty-mile jaunt over snow-clogged roads that were not much more than a trail. Petroleum Center, where the wells at that time were in operation, was little better than a wilderness. And the last quarter of a mile of their approach was impassable. Dismounting, the future oil king and the miller prepared to finish the journey on foot. Almost at their journey's end was a gully filled with the refuse from the wells, and over this a foot-log for passengers.

Mr. Rockefeller looked at the impromptu bridge dubiously. "Isn't there some way to go around this thing, Mr. Breed?" he queried.

"No, we will have to make it!" responded the miller cheerfully, and straightway led onward.

Safely across, he turned to help Mr. Rockefeller, and was just in time to see him slip off into the greasy, ill-smelling mess!

"Well, Breed," said Mr. Rockefeller, drily, as soon as he stood on firm ground, "I guess you have got me in the oil business, head and feet."

Mr. Breed was too concerned, then, even to smile. Procuring some barrel staves he scraped off as much of the tarry mixture as possible, and was for turning home-

ward. But Mr. Rockefeller insisted upon seeing everything in connection with the wells, "since he had dipped into the business!"

He had to buy an entire new outfit of clothing before he left Titusville, but the trip had evidently convinced him entirely. Mr. Breed, who delighted in the tale all his life, always finished by concluding: "It was only a day or two afterward that I got an order from Mr. Rockefeller for a carload of oil, and I got more after that. He always maintained every time that I met him that I was responsible for making him an oil refiner and an oil merchant, and I rather took most of the credit to myself, too. But he made a great deal more out of oil than ever I did."

And why?

Because John D. Rockefeller possessed in an unusual degree the faculties for unceasing industry and strong tenacity of purpose. Having once taken hold of a thing "all heaven and earth couldn't make him let go." At the outset the profits were large, and naturally oil refineries sprang up in divers places. Soon, as was to be expected, over-production lessened the price of oil, and many of the rival mushroom growths faced financial ruin. Then, Mr. Rockefeller showed his first great burst of initiative: he began at once to buy up the most desirable of these embarrassed refineries and planned to market his product abroad. Soon pipe lines were built to transport the crude oil to all the near-by cities. Then came the tank car and the tank steamer for delivering the refined product. Day by day grew his plans of increasing his business output and extending his trade lines, until his kerosene and gasolene reached the uttermost parts of the earth, and he had gone into the question of by-products—vaseline, axle-grease, petroleum jelly, benzine, naptha, paraffine, analine dyes, lubricating oils,

and what not—until nothing was lost. Probably no other concern surpassed the Standard Oil in the extent and excellence of its organization and the completeness of its scientific operation. With its various allied interests it was one of the most extensive and financially powerful industrial concerns in the world. It paid annual dividends of never less than 40 per cent.; stock which had a par value of \$100 per share sold for around \$1400 per share when it sold at all! The Standard Oil had become a great and powerful Trust, which sapped up every competitive industry in its path.

Naturally long before this, Rockefeller and the Rockefeller fortune had been under suspicion. Both were assailed with relentless vigor, and there was a great hue and cry of "tainted money." We have no space for a discussion of this here. We can only quote, in passing, a paragraph from one of his biographers which touches this point, and gives a real glimpse of the man John D. Rockefeller, of whom the world then knew comparatively little: "On the day, several years ago, that the federal circuit court was reviewing the case in which the Standard Oil Company was fined \$29,000,000, and was expected to hand down its decision that afternoon, Mr. Rockefeller spent the day with William Humiston, a lank, grizzled farmer cousin whose farm lies a few miles southeast of Cleveland. He talked of nothing but farming and gardening and early day conditions during the visit. Lunch was invitingly spread by the Humiston daughters under the trees in the farmhouse yard, and Mr. Rockefeller ate sparingly, drank copiously of spring water after the meal, and lectured Cousin William seriously upon the evils of over-eating. For Cousin William had a true farmer's appetite."

At one time Mr. Rockefeller came near becoming a power in the iron trade. He owned considerable stock

in various rich mines in the Lake Superior ore district, bought merely as a matter of investment. When the panic of 1893 came along, this district was hard hit, and to save his own holdings Rockefeller had to buy up a controlling interest. It was easy to acquire the stock; it was "fairly tossed at him in bundles." But to get the ready money to float it required an accomplished borrower. Mr. Rockefeller, however, was equal to the emergency. Long before, he had gotten the name of a rapid-fire worker along this line. On a certain occasion, we are told, "His ride from bank to bank was something on the Paul Revere order." At each one he stopped just long enough to find how much he could get; but he made the rounds, got off on the train he had to make, and put his deal through. This borrowing ability now stood him in good stead. At panic prices he bought up ore lands which are today worth millions of dollars. Then, with his usual enterprise, he set out to make good on his investment. The mines were put in operation, and he began building vessels to transport his product to market. In 1900, when this property was sold to the U. S. Steel Corporation, Mr. Rockefeller had in operation a fleet of fifty-six vessels, of the largest, most improved type known in the lake ore trade.

John D. Rockefeller was essentially a "home-man." He never cared to travel about. He had a passion for landscape gardening, and he derived the greatest pleasure and recreation from personally superintending the planning and laying out of the beautiful grounds on his two estates, at Forest Hill, Cleveland, and Pocantico Hills, Tarrytown. He was a master-hand at executing winding drives, and in arranging beautiful and artistic effects of shrubbery, while his tree groupings are magnificent. Both houses have wonderful views, the one over Lake Erie, and the other over the Hudson. He was

glad at all times to have distinguished visitors and delegations shown over his grounds, but on such occasions he carefully kept in the background. He was a devoted golfer and liked nothing better than trimming a boasted antagonist on the links.

He had an ideally beautiful home life, and in one of his Sunday morning talks in the Euclid Avenue Baptist Church, of which he was a member from his early teens, he said: "People tell me I have done much in my life, but the best thing I ever accomplished, the thing that has given me the greatest happiness, was to win Cettie Spelman." He married Laura Celestine Spelman, his boyhood sweetheart, in 1864, just about the time he made his first plunge in oil. Four children, Elizabeth, Alta, Edith, and John D. Junior, were born to this union. All married, and Mr. Rockefeller became a many-times-beloved grandfather, keen of wit, good humored, and with a rare faculty for "hitting the bull's-eye of observation nine times out of ten."

For the last twenty years and more he was not in any way interested in making money. "The literal truth is," says one who knew him in his years of retirement, "that Mr. Rockefeller has for many years been largely concerned with golf, his health and *the giving away of money*. What motives or what conditions made it possible for him to accumulate a vast fortune thirty or forty years ago are now only of historic interest." Nor has his son "John D. Junior," who now has active control of the large Rockefeller interests, ever cared to increase his father's accumulations. "His real interests are those of philanthropy and religion, and he begrudges the very small amount of time which he gives to business. He wishes to have his investments conserved, but he does not go into new things, and it is a fact that he is one of the hardest worked men in the country, not in making

money, but merely in overseeing the big staff which undertakes, first, to keep intact what he and his father already have, and second, to give it away to the greatest advantage."

Together John D. Rockefeller and his son have given away more than half a billion dollars. And much of their philanthropy has been of a modest order, following literally the Divine Ruler's command in His Sermon on the Mount: "Let not thy left hand know what thy right hand doeth." Of the notable gifts are the sum of \$23,000,000 to the University of Chicago, \$1,000,000 or over to Barnard College, Harvard and Yale Universities, and the Southern Educational Board, and to various juvenile reformatories; also land for park purposes for the city of Cleveland, \$1,000,000. Added to these might be mentioned numerous other gifts ranging from \$25,000 to \$750,000. To only two of his many benefactions has he given his name. One of these is the Rockefeller Institute for Medical Research, which has already accomplished world-wide results in grappling with spinal meningitis, the hookworm, and other deadly diseases. The other is the Rockefeller Foundation, which is the final philanthropist of his estate, acting as a trust for "the promotion of the well-being of mankind throughout the world."

Many word-pictures have been painted of John D. Rockefeller. Before he retired from the world of finance, popular conception clothed him as markedly unfriendly, cold, grasping and avaricious. This was in a measure because the world did not know him. Always modest and retiring, and prone to "hide his light under a bushel," he shrank from interviewers and publicity. Much of his reserve perhaps arose from the fact that he was always exceedingly busy. He had not the leisure even to make friends! Now the world knows

him better. Any one who was ever privileged to spend an hour or two with him left with the lasting impression of a courteous, kindly gentleman, without a hint of arrogance in his make-up. Through his conversation ran a trend of whimsical humor, flecked with sound sense from the philosophy of life which was his by hard experience.

He proved himself truly great, not by the record-breaking fortune which he amassed, but by his wisdom in expending it for the benefit of mankind.

ANDREW CARNEGIE

ANDREW CARNEGIE began life November 25, 1837, in the ancient burg of Dunfermline, Scotland. His father, William Carnegie, a master linen-weaver before the days of steam, was a man of rugged character, a born reformer, and a hot radical, who was often in demand in Fifeshire for political speeches. His mother was a remarkable woman of fine intelligence, and a fund of strength and determination which made light of all obstacles. She gave her two sons, Andrew and Thomas, their first start in knowledge, and indeed was almost their only teacher.

With the introduction of steam machinery and the rise of the factory, the fortunes of the Carnegie family met a sudden downfall. William Carnegie, who with his four looms and apprentices, had made a comfortable living supplying the merchants with handwoven linen, now found his occupation gone, and himself obliged to look elsewhere for means of support. What could he do? There seemed no future for either him or his boys in England, and after careful consideration he decided to transfer his family to America.

The voyage was made in a sailing vessel, and the new home established at Allegheny City, then a town of about ten thousand, opposite Pittsburgh. There Andrew found his first employment, when twelve years of age, as a bobbin-boy in a cotton factory at \$1.20 per week. But this job was not altogether to his liking; so having a natural knack for machinery, he learned to run a steam

engine, and got work as an engine-man in a factory for making bobbins. Here, chance brought his knowledge of arithmetic and his fair handwriting to the notice of his employer, who promptly advanced the boy to a clerkship. This position, however, entailed a good deal of heavy lifting and drudgery of such order that "Andy" determined to keep an eye open for something better.

He was stimulated in this perhaps by a course of reading he was enjoying, thanks to Colonel Anderson, a well-to-do Allegheny citizen of a philanthropic turn, who announced that he would be in his library at his home, every Saturday, ready to lend books to working boys and men. "He only had about four hundred volumes," said Mr. Carnegie, later, "but I doubt if ever so few books were put to better use. Only he who has longed, as I did, for Saturday to come, that the spring of knowledge might be opened anew to him, can understand what Colonel Anderson did for me and others of the boys of Allegheny. Quite a number of them have risen to eminence, and I think their rise can be easily traced to this splendid opportunity."

There can be doubt of this.

"Andy," looking about for his next step upward, noted a placard in the office window of the Ohio Telegraphy Company:

BOY WANTED

The salary, on investigation, proved to be \$2.50 per week, and "Andy" at once determined to be the lucky boy. "I often live over that day," he said once, "when a little white-haired Scottish laddie, dressed in a blue jacket, walked with his father into the office to undergo the tests set for the applicant."

Mr. Reed, the superintendent, was himself a Scotchman, and he took to the boy at once. For "it was easy

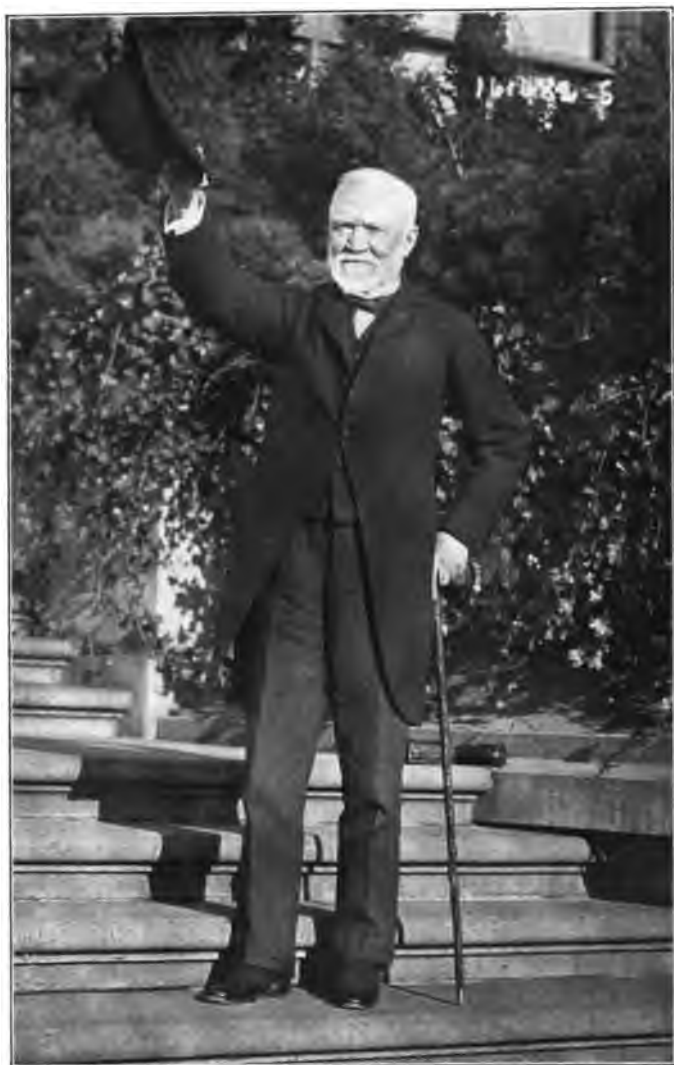
to see that though he was small, he was full of spirit."

"Perhaps you may guess," wrote Mr. Carnegie later, "what my entrance as a worker in the office meant to me: It was a transition from darkness to light—from firing a small engine in a dark and dirty cellar into a clean office with bright windows and a literary atmosphere, with books, newspapers, pens, and pencils all around me. I was the happiest boy alive."

And that in spite of the fact that one of his first duties was to sweep the office!

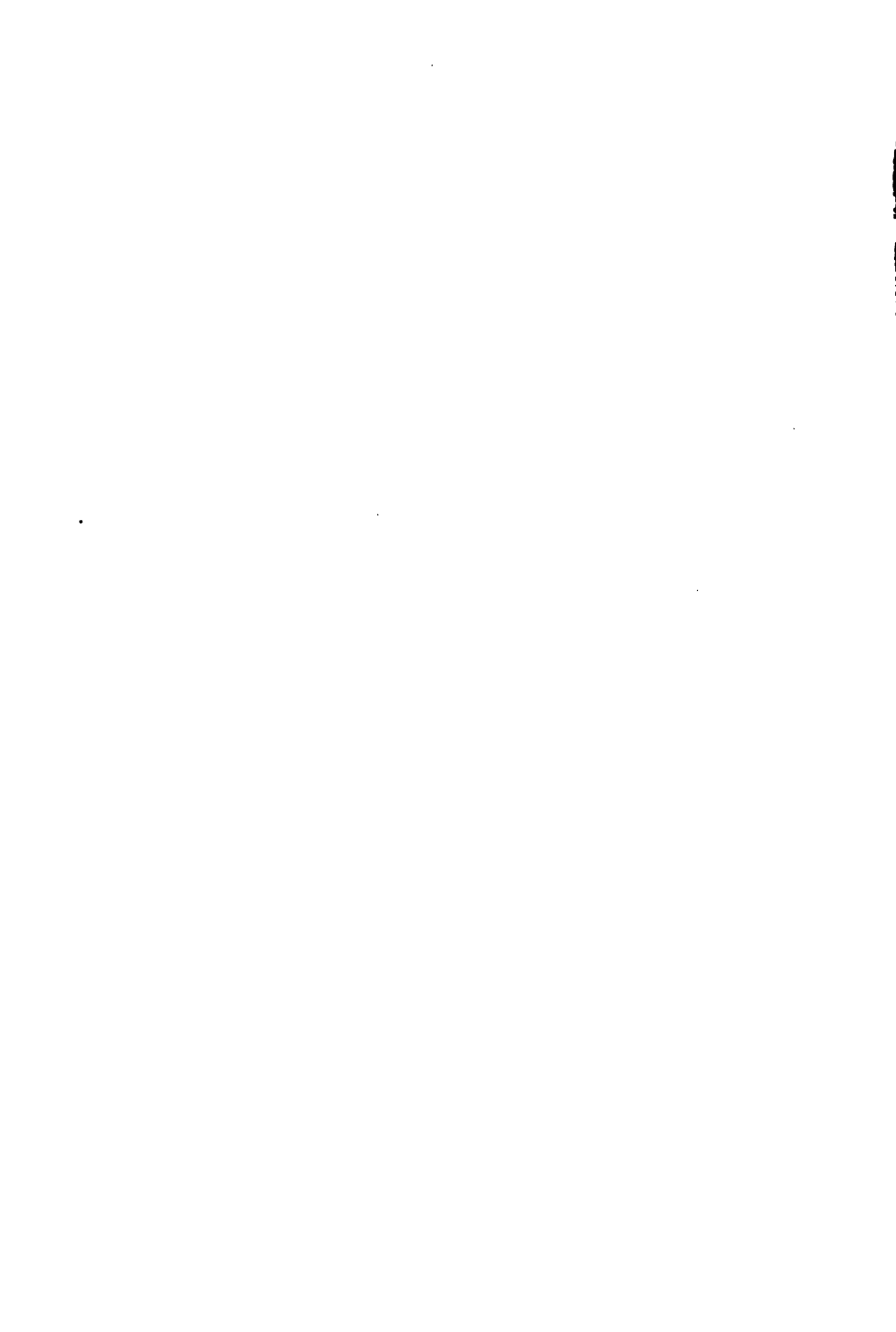
Who do you suppose his fellow sweepers were? Mr. Carnegie put this in print years later: "David McBargo, afterward superintendent of the Allegheny Valley Railroad; Robart Pitcairn, afterward superintendent of the Pennsylvania Railroad, and Mr. Moreland, subsequently City Attorney of Pittsburgh. We all took turns, two each morning doing the sweeping; and now I remember Davie was so proud of his clean shirt bosom that he used to spread over it an old silk bandana handkerchief which he kept for the purpose, and we boys thought he was putting on airs. So he was. None of us had a silk handkerchief."

None of them saw the drudgery of the work either! Their eyes were fixed on a higher goal. But for Andrew Carnegie the conditions of upward progress were unusually hard. His father died about this time, and upon his shoulders fell the burden of supporting the little family. He met it without flinching, and his cheery attitude once more proved a stepping-stone. For by now Andy had mastered the duties of a telegraph operator. All his spare time had been spent under no less a tutelage than his superintendent, sending and receiving messages. Now he could do as well at the key as his chief, and he had his reward in a position as operator in the telegraph office at \$25 a month,—a sum



COPYRIGHT BY UNDERWOOD & UNDERWOOD

ANDREW CARNEGIE



which seemed to him like a fortune, for on it the family could be independent. He earned a little additional money by copying telegraphic messages for the newspapers, and was now on the road to success.

Of this period of the young man's career the *Electric Age* records: "He was a telegraph operator abreast of older and experienced men; and, although receiving messages by sound was, at that time, forbidden by authority as being unsafe, young Carnegie quickly acquired the art, and all his later life he could stand behind the ticker and understand its tongue. As an operator he delighted in full employment and the prompt discharge of business, and a big day's work was his chief pleasure."

And so when the Pennsylvania Railroad needed an operator Andrew Carnegie was at once chosen from the long list of applicants. His fame had begun to go abroad: men knew that he could be depended on for the very last ounce of service. And here in his new position he first developed the peculiar qualities which later made him the manager of men and the director of broad and useful enterprises. He soon mastered the details of despatching, and showed how the telegraph could be made to minister to railroad safety and success.

Then again industry and perseverance won: the young man was made assistant-superintendent, with an office at the company head-quarters. A little later, when his chief was moved up to the duties of vice-president, Carnegie stepped into his place, and had upon his broad young shoulders the responsible duties of superintendent of the Western division of the Pennsylvania Railroad.

One day, when Mr. Carnegie was out personally inspecting his line, a tall spare man accosted him and asked him if he would kindly look at an invention he had made. Always courteous, Mr. Carnegie expressed

his willingness, and the man produced from a small green bag a tiny model of a sleeping berth for railway cars, and proceeded to explain its merits.

"Before Mr. Woodruff had spoken a moment," recorded the superintendent, "like a flash the whole range of the scheme burst upon me. 'Yes,' I said, 'that is something which this continent must have.' Upon my return I laid it before Mr. Scott, declaring that it was one of the inventions of the age. He remarked: 'You are enthusiastic, young man, but you may ask the inventor to come and let me see it.' I did so, and arrangements were made to build two trial cars, and run them on the Pennsylvania Railroad. I was offered an interest in the venture, which, of course, I gladly accepted. . . .

"The notice came that my share of the first payment was \$217.50. How well I remember the exact sum! But it was as far beyond my means as if it had been millions. I was earning \$50 a month, however, and had prospects, or at least I felt I had. I decided to call on the local banker and boldly ask him to advance the sum. He put his hand on my shoulder and said: 'Why, of course, Andy, you are all right. Go ahead! Here is the money.'

"It is a proud day for a man when he pays his last note, but not to be named in comparison with the day in which he makes his first one, and gets a banker to take it. I have tried both and I know. The cars paid the subsequent payments from their earnings. I paid my first note from my savings, so much per month, and thus did I get my foot upon fortune's ladder."

And thus also came sleeping-cars into the world! But, their greatest success was not achieved until George M. Pullman took them in hand. This, however, is a story that must be told some other time.

In connection with this item of saving, early established, which proved the foundation of Mr. Carnegie's

vast fortune, a reporter once said to him: "I would like some expression from you in reference to the importance of laying aside money from one's earnings, as a young man."

"You can have it," responded the canny Scott, enthusiastically. "There is one sure mark of the future millionaire; he begins to save as soon as he begins to earn. I should say to young men, no matter how little it may be possible to save, save that little. Invest it securely, not necessarily in bonds, but in anything which you have good reason to believe will be profitable; but no gambling with it, remember. A rare chance will soon present itself for investment. The little you have saved will prove the basis for an amount of credit utterly surprising to you. Capitalists trust the saving young man: For every one hundred dollars you can produce as the result of hard-won savings, Midas, in search of a partner, will lend or credit a thousand; for every thousand, fifty thousand. It is not capital that your seniors require, it is the man who has proved that he has the business habits which create capital. So it is the first hundred dollars saved that tells."

When the Civil War broke out, Mr. Carnegie's old chief, Colonel Scott, was Assistant Secretary of War, and by his advice the capable young Scotchman was called to Washington and given charge of the military railroads and telegraphs of the government in the East. Needless to say, this service had the best he could put into it. At the battle of Bull Run Carnegie was on the field in charge of the railway communications, and was the last official to leave for Alexandria.

In company with several others, at the close of the war, Mr. Carnegie purchased the now famous Storey farm, on Oil Creek, Pennsylvania, where a well had been bored and natural oil struck the year before. This proved a very profitable investment. But Mr. Carnegie was not

content to rest on these winnings. Railway bridges were then built almost exclusively of wood, but the Pennsylvania Railroad had begun to experiment with cast iron. With his usual insight, Mr. Carnegie saw that the railroad bridges of the future would be of iron; so he organized, in Pittsburgh, a company for the construction of iron bridges. That was the Keystone Bridge Works. Their first great success was an iron bridge across the Ohio River.

Realizing the coming immensity of the steel manufacturing business, Mr. Carnegie also entered this realm, and, following a visit to England, shortly after the Bessemer process had been perfected, he introduced it into his mills, and was soon making steel rails second to none. He now purchased the Homestead Steel Works,—his great rival at Pittsburgh. This was followed by other iron and steel works until presently the Carnegie Steel Company Limited owned within a radius of five miles at Pittsburgh such an aggregation of splendidly-equipped steel works, seven in all, as could be found in no other part of the world.

To build up this immense business within a single generation and to shape its destinies so successfully as to make it not only the equal, but the superior, of all similar industries on the globe, was a feat of which any man might be proud and which few men have had the capacity to accomplish. That Mr. Carnegie accomplished it is a proof not only that he possessed an extraordinary business capacity, but also that he was a born ruler of men. It was a favorite maxim of his that "He who succeeds best in the world is he who knows how to avail himself of the labor of other men." Certainly in this Mr. Carnegie excelled. His fine instincts and keen judgment enabled him to see at a glance the capacities and capabilities of both men and things. He seemed to

know intuitively what a man could do, and he thoroughly trusted every man whom he employed.

Andrew Carnegie was a strong advocate of the payment of labor based upon the prices obtained for the products manufactured. Each month the firm's business correspondence and results were laid before a committee appointed by the men themselves, and an average struck as the basis for the next month's wage. As an incentive to save, the firm loaned to any of its workmen money to buy a lot and to build, taking its payment by installments. A workman, also, might deposit his savings with the company, not to exceed \$2000, on which the high rate of 6% interest was allowed. Needless to say, these arrangements were all eminently satisfactory to the men and to the company. Moreover, each worker, no matter how humble, was made to feel from the beginning that exceptional service meant promotion. The man who was worthy was bound to rise; he who was not, eventually got out. And those of the latter class were few indeed. At Mr. Carnegie's retirement from the business, the monthly pay roll exceeded \$1,125,000, or about \$50,000 per working day. With the exception of a small strike at the Homestead Works there was never any serious difference between the firm and its men.

In Mr. Carnegie's native land, Scotland, thrift is a virtue that is taught with the alphabet, and the canny Scot himself seemed to be filled with it. One of his articles, "The Gospel of Wealth," published in the *North American Review*, in 1889, contained his sentiments in regard to the rich man's duty to his fellow-man. To quote his own words,—“The man who dies rich, dies disgraced. That is the Gospel I preach, that is the Gospel I practise, and that is the Gospel I intend to practise during what remains of my life.”

Later in one of his public speeches—for Mr. Carnegie

was an orator as well as a writer—he gave a further interpretation of his duty, as he saw it, namely to be of service to his fellow-men in that which would tend to elevate the race: “What a man owns is already subordinate in America to what he knows,” he said; “but in the final hearing the question will not be either of these, but what has he done for his fellows? Where has he shown generosity and self-abnegation? When has he been a father to the fatherless? And the cause of the poor,—where has he searched that out? How he has worshipped God will not be asked in that day, but how he has served man.”

Again, he wrote: “Men who, in old age, strive only to increase their already too great hoards, are usually slaves of the habit of hoarding, formed in their youth. At first they own the money they have made and saved. Later in life the money owns them, and they cannot help themselves, so overpowering is the force of habit, either for good or evil. It is the abuse of the civilized saving instinct, and not its use, that produces this class of men. No one needs to be afraid of falling a victim to this abuse of the habit, if he always bears in mind that whatever surplus wealth may come to him is to be regarded as a sacred trust, which he is bound to administer for the good of his fellows. The man should always be a master. He should keep money in the position of a useful servant; he must never let it be his master and make a miser of him. A man’s first duty is to acquire a competence and be independent, then to do something for his needy neighbors who are less favored than himself.”

That Mr. Carnegie thoroughly lived up to this doctrine is proved by the monument of good works which he left behind him. Chief among those which may be briefly mentioned here are his library endowments. Mr. Carnegie firmly believed that boys and girls might learn the science

of true life and success in good books; and in early youth while enjoying the prized privilege of good reading extended to him at the hands of Colonel Anderson, he resolved that if ever surplus wealth came to him he would imitate his kind benefactor. All the world knows the Carnegie libraries, free to rich and poor alike; not one of us but have delighted in their service, and thought with grateful hearts of the man whose thrift and industry, coupled with his love for his fellow-men, made this great gift possible.

The Carnegie Institute of Technology, founded at Pittsburgh, in 1900, is in truth four separate schools, where day and night instruction may be had at a price within reach of the working classes. The School of Applied Science offers courses in all branches of engineering. The School of Applied Design treats architecture, painting, decoration, illustration, and music. The School of Applied Industries aims mainly to give an eight months' finishing course to those who have had experience in machine shop work, pattern making, mechanical drawing, electric wiring, plumbing, foundry, forging and brick-laying. The Margaret Morrison Carnegie School for Women embraces two years training in various branches: household economics, costume economics, secretarial work, and home arts and crafts. In connection with the institute there is operated a 750-acre engineering camp, called Camp Louise Carnegie, where opportunity is afforded for practical field work of various kinds.

The Carnegie Institute, at Washington, D. C., founded in 1902, provides for "the encouragement, in the broadest and most liberal manner, investigation, research, and discovery, and the application of knowledge to the improvement of mankind." This institute maintains departments of Botanical and Historical Research, and departments of Economics, Astronomy, Nutrition, etc.,

where much valuable work is done. A department of Experimental Evolution is established at Cold Spring Harbor, New York; a department of Marine Biology, at Tortugas, Florida; considerable of the botanical research work is carried on at Desert Laboratory, Tucson, Arizona. Not the least of the work of the institute is the publication of the various researches of the different departments, amounting to three hundred volumes per year. These are distributed free to the larger libraries; others may obtain copies at approximately the cost of publication.

The Carnegie Hero Fund Commission aims to aid financially those citizens who have been injured in trying to save human life. In case of death, the widow and children or other dependents are to be provided for until the wife remarries and the children reach a self-supporting age. This fund is apportioned in the United States, Canada, and New Foundland on this side of the water, and abroad in Great Britain and Ireland, France, Germany, Belgium, Netherlands, Sweden, Norway, Switzerland, Italy, and Denmark. It was founded in 1904, Mr. Carnegie's initial gift being \$5,000,000.

In 1905 came a bequest of \$10,000,000, to endow a Foundation for the Advancement of Teaching. Part of the object was the pensioning of underpaid college professors.

Mr. Carnegie was also keenly interested in the promotion of peace, and in 1910 gave \$10,000,000 for the Carnegie Endowment for International Peace. The Hague Tribunal is in part a monument to his efforts.

Thus for the last twenty years of his life, he tried to live up to his ideal of "dying poor," though this could not literally be accomplished. He passed away at Lenox, Mass., August 11, 1919, having given away four hundred million dollars! It is said that his benefactions

exceeded those of any other one man. Of him it can truly be said: "His gifts and bequests have stirred the very heart of Mammon as it has not been stirred since the Savior told the rich man to sell what he had and give to the poor." He was, however, very reluctant to accept the title of philanthropist, holding that the term usually meant "a man who had good impulses, but was destitute of good sense!"

HENRY MORTON STANLEY

It is not often that a homeless, penniless boy becomes a member of some of the most distinguished societies in the world, is married in Westminster Abbey, and sits in the English Parliament.

Sometime in the year 1841, a child was born in a plain cottage in Denbigh, Wales. His father, John Rowlands, died a few weeks after his birth and his mother left him to the care of an aged grandfather, Moses Parry, who died when the boy was about five.

The two uncles who lived in the lower part of the cottage, did not want their sister's child, and so boarded him with an old sexton, Richard Price and his wife Jenny, for half-a-crown a week; about sixty-two and a half cents in our money. This proving insufficient remuneration for a healthy appetite, a larger price was demanded. The uncles had married, and refused to pay. Then the sexton's son, telling the boy he would take him to his Aunt Mary, started with him February 20, 1847, on a long journey. It ended in St. Asaph Union Workhouse, a stone building with big iron gates, an institution for the aged poor, and the unwanted children of the parish.

The trembling, frightened child of six years, was now utterly desolate. Tears flowed at the wretched treachery, and loneliness. Mr. Stanley wrote later in his Autobiography, a volume of absorbing interest published by his wife. "Though forty-five years have passed since that dreadful evening, my resentment has not a whit abated. . . . To the aged it is a house of slow death, to the young it is a house of torture."

Nine long years had passed at the Workhouse in which the boy hungered for affection, and a home. He was thankful, however, that he had been taught to read, and had received such religious instruction that all through life he strove to do that which was right rather than evil. But the crisis came at last.

The schoolmaster was to beat the whole class, because nobody seemed to know who had stood on a new table and made dents in it. Young Rowlands, now nearly fifteen years old, declared that he did not do it, and when he refused to be punished, a fight ensued and the master's own blackthorn was used vigorously on himself. The world outside could be no more dreadful than the "institution," and the lad and his friend Mose, climbed over the garden wall and ran away.

But the world outside soon proved a desolate place to a homeless waif. People knew from their garb that they belonged to the Workhouse. The first night they slept in a disused lime-kiln. The next day a motherly old lady who was washing gave them food. The second night they slept in the lee of a haystack, and that day reached Denbigh.

Back now in his birthplace young Rowlands called upon his relatives, but they one and all told him to go back the way he came. "I can do nothing for you," he was told, "and have nothing to give you."

Finally his Aunt Mary gave the lad a new suit of clothes, slipped a gold sovereign (about five dollars) into his hand, and bade him be a good boy, go to Liverpool and make haste to get rich!

Liverpool with its big houses and ships, seemed like a new world.

After tramping the streets, at last work was obtained in a shop from seven in the morning till nine at night, sweeping, trimming lamps, washing windows and the

like. The only bright spot in the darkness was the assurance of an uncle: "Aye, laddie, thou'lt come all right in the end. It's a little hard at first, I know, but better times are coming, take my word for it."

The boy became ill from the hard work and lost his place. Then followed another month of looking for work, two weeks as a butcher's errand boy carrying meat to the ships at the docks, and then an engagement at five dollars a month to sail to New Orleans as a cabin-boy on the packet-ship, *Windermere*. His uncle and aunt, poor as they were, tried to dissuade him from leaving his own country, but he said, "It is no use, uncle, I must go. There is no chance of doing anything in Liverpool."

John Rowlands, unwanted, unloved, was adrift on the ocean. He found a new and bitter experience. He was no cabin-boy but a daily drudge. The brutality of the mates sickened him. The iron belaying-pins were freely used on the men. What wonder that after fifty-two days of ship-life, he was glad to be on American soil, even if homeless and penniless, for no money had been given him for his work.

And this was the New World! He would take his chances and not go back on the cruel ship. He would see what the city had in store for him in the morning, but to-night he would sleep in the shadow of a pile of cotton bales.

Awakening early he walked down among the commission stores. In front of one he saw a kindly faced, middle-aged man reading his morning paper. The lad ventured to ask, "Do you want a boy, sir?"

The man addressed thought he did not, but asked what work he could do, if he could read, and what book he had in his pocket?

"It is my Bible, a present from our Bishop," replied the boy. Asked if he could mark coffee-sacks with a

brush, he did well, and then was taken by his new friend to a restaurant for breakfast. The boy never forgot that he had "superb coffee, sugared waffles and doughnuts." Then after having his hair cut, and his clothes brushed he was led to Mr. James Speake, the proprietor, who hired him upon trial for one week at five dollars.

A new life had begun. The tears blinded the boy's eyes as he worked. He inquired about the man who had befriended him; learned that he, at one time a minister, now did business with the planters up the river, and traded through a brother, with Havana and other West Indian ports; and that his name was *Mr. Stanley*.

At the end of the week young Rowlands was hired permanently at twenty-five dollars a month, which seemed a fortune. He paid ten dollars for board and lodging, and had money left to buy books for his attic room. He no longer was friendless nor lonely—his books were the best company.

A month later Mr. Stanley returned and invited the lad to his home to breakfast. Mrs. Stanley, a fragile and lovely woman, refined and educated, received him most kindly. To the boy she seemed like an angel. They took the lad to church each Sunday, and showed more and more interest in him. Mr. Speake increased his salary to thirty dollars a month, Mr. Stanley called at his humble boarding house and took breakfast with him, an honor that made him thankful and happy. He also bought Shakespeare, Irving, Goldsmith, Cowper and other authors for him, and often took him home. But changes were coming. Mr. Speake died, the firm passed into other hands, and the lad lost his position. Then Mrs. Stanley whom he revered and loved also died, telling him to "Be a good boy, God bless you!" As Mr. Stanley was absent, her body was taken to St. Louis, at his request.

Again the lad searched two weeks for work. He sawed wood and did odd jobs for private families. Mr. Stanley had returned to New Orleans, so the boy worked his passage down the river and finally found him.

Mr. Stanley was overjoyed to see one who had done all in his power for his dying wife. He folded him in his arms, while the boy broke down and sobbed. He had already made up his mind to educate one whom he felt God had put into his care. Finally he said "As you are wholly unclaimed, without a parent, relation, or sponsor, I promise to take you for my son, and fit you for a mercantile career; and, in future, *you are to bear my name, Henry Stanley.*" He dipped his hands in water and made the sign of the cross on Henry's forehead, telling him to bear his new name worthily.

"The golden period of my life began from that supreme moment . . . I began to see a new beauty in everything," said young Stanley, years afterward. "The men seemed pleasanter, the women more gracious, the atmosphere more balmy! As we walked the streets together, many a citizen must have guessed by my glowing face and shining eyes that I was brimful of joy."

New clothes in abundance were provided. Henry traveled with his father on his business trips, studied the best books, and learned constantly from the superior mind of his adopted parent. For two years life seemed a dream, too beautiful to be true. He was taught the highest ideals, and responded with the love and trust of his ardent nature.

In September, 1860, Mr. Stanley was called to Havana by the illness of his brother, and Henry was to stay for a time with an acquaintance. The parting was a sad one, and it proved to be forever. Mr. Stanley soon died, and the youth was again adrift.

The Civil War had begun. Men were enlisting, some from patriotism, some from love of adventure, and young Stanley joined the Confederate ranks because his Southern friends had enlisted. But he soon learned all the horrors of war. He was at the dreadful two days' battle of Shiloh when the Union forces lost in killed, wounded and missing over 13,000 men, and the Confederates about the same.

On the second day of the battle Stanley, with others, was taken prisoner, and sent to Camp Douglas on the outskirts of Chicago. This, like other prison pens where thousands of men were gathered, became a place of disease and death. Soon he was compelled to go to the hospital at Harper's Ferry, and June 22, 1862, he was discharged, penniless and a wreck in health.

During the next four months, he supported himself as best he could. Now he worked in the fields in harvesting, and then on an oyster-schooner. His only true friend dead, he longed to return to England. The New World seemed to have brought him about as much sadness as the Old. In November, 1862, when he was twenty-one, he reached Denbigh, in Wales, and sought his mother's house. He was poorly dressed, poor in health, and poor in purse, but he longed for a mother's love. He says in his journal, "I was told that 'I was a disgrace to them in the eyes of their neighbors, and they desired me to leave as speedily as possible.'" He never sought his relatives again. When he had become famous and prosperous years afterward, "he was just to the claim of blood, and gave practical help," says his wife, but he never asked again for their affection. He returned to

- America, and entered the merchant service, sailing to the West Indies, Spain and Italy.

In August, 1864, he enlisted in the United States Navy, and served as Ship's Writer. He reported the taking

by the Union forces of Fort Fisher, North Carolina, and the papers were glad to welcome his vivid articles. During 1865 he visited Denver, Omaha, Salt Lake City and the Indians, and probably paid his way by newspaper correspondence. The next year, with a friend, he went to Asia, but they were robbed by the Turkomans, and the journey came to naught.

In 1867, when he was nearly twenty-six, his real work seems to have begun. He was made "special" correspondent of the *Missouri Democrat*, St Louis, to "write up" Northwestern Missouri, Kansas and Nebraska, and to join General Hancock's expedition against unfriendly Indians. He also wrote for the *New York Herald*, *Tribune*, *Times*, *Chicago Republican*, *Cincinnati Commercial*, and others.

Nearly thirty years later, these letters to the newspapers were made into the first of two volumes, "My Early Travels and Adventures in America and Asia." This same year, 1868, he went to New York, and he says "by a spasm of courage, I asked for Mr. Bennett," editor of the *New York Herald* whom he had never seen. Stanley wished to go with the British expedition against King Theodore of Abyssinia and for this end made arrangements to write for the *Herald*. Through great enterprise and energy he succeeded in giving the *Herald* the first news of the overthrow of the King.

On October 16, 1869 a telegram came to Stanley from James Gordon Bennett, Jr., then in Paris. The whole English-speaking world had been asking what had become of David Livingstone, the great medical missionary and explorer of Central Africa. He had given his life to the Dark Continent. He had buried his wife in the savage land. His children were in England and he, now an old man, was alone, and it was reported that he was dead. Aid had been sent by England, but he never

received it. Letters and packages had been stolen by the Arab slave dealers, who feared that he would arouse the people to put an end to their horrible traffic. Mr. Bennett's instructions were laconic. "*Find Livingstone,*" he said.

"What is in the power of human nature to do, I will do," replied the brave young traveller.

He reached the island of Zanzibar off the coast of Africa, January 6, 1871. No word had been received in Europe from Livingstone since May, 1869. In a little more than two months, the expedition was ready; three white men, thirty-one freemen of Zanzibar as escort, one hundred and fifty-three porters, twenty-seven pack-animals, two riding horses, hundreds of pounds of brass wire, many thousand yards of cloth, white and colored, to barter for food and service, his boat, medicine, tools, all weighing about six tons.

For nearly eleven months, through swamps and jungles, often ill with fever, in the midst of hostile tribes or thieving Arabs, the caravans made their tedious way. The roads were usually a mere foot-path. The rivers had to be waded, with water up to their necks, or trees felled and a bridge constructed with pack saddles and thick layers of grass. They often crept on their hands through the noisome jungles. Hippopotami, alligators and crocodiles were in abundance. Insects of almost every kind, white ants, centipedes, beetles, and the tsetse (fly), were numerous and nearly crazed the animals. The two horses soon died and several of the donkeys. Their bones were picked clean by hyenas.

Many of the men became ill and Stanley nursed them, and many deserted. Both of the white men died. The little dog "Omar" which Stanley had brought from Bombay and of which he was very fond, also died.

Once when well-nigh discouraged, Stanley wrote in his

journal: "No living man shall stop me—only death can prevent me. But death—not even this: I shall not die—I will not die—I cannot die! Somthing tells me I shall find him."

When they reached Ujiji, November 10, 1871, a great crowd came out to meet them. Soon a voice said, "Good morning, Sir?" Stanley, astonished, said "Who are you?"

"I am Susi, the servant of Dr. Livingstone."

"Run and tell the Doctor I am coming."

Soon a gray-haired, tired-looking man appeared.

"Dr. Livingstone, I presume."

"Yes," he said with a cordial smile, lifting his cap.

"I thank God, Doctor, that I have been permitted to see you."

"I feel thankful that I am here to welcome you," was the reply. The long-looked for, long-prayed for hour had come at last.

For four months these two white men lived happily together. They sailed three hundred miles around the north shore of Lake Tanganyika and then journeyed east to Unyanyembe. Here Livingstone completed his journals and letters to be sent back to Europe, as he would not return till he had made further explorations on the sources of the Nile.

They parted sadly, March 14, 1872, and Stanley arrived in Zanzibar fifty-four days later. With great difficulty he had forded rivers, swinging ropes across from tree to tree on opposite banks, the precious Livingstone journals carried on the heads of men up to their necks in water.

Stanley was received with open arms in Europe on his return from his perilous journey. He spoke before three thousand, at the meeting of the Geographical Section of the British Association, many of them dis-

tinguished persons, including the ex-Emperor and Empress of the French. Lord Granville at the Foreign Office sent him from Queen Victoria her thanks with a gold snuff-box set with diamonds, and later she received him and talked with him. Even his relatives had awakened to the fact that the boy from the St. Asaph Workhouse had become famous, and sent affectionate requests for money, which he could not refuse.

Livingstone had died eight months after they parted, at Ilala, near Lake Bangweolo, May 4, 1873. After salting and drying his body in the sun for two weeks, it was borne on the shoulders of his servants, fifteen hundred miles to the ocean. On April 18, 1874, Livingstone was buried in Westminster Abbey. Among the bearers were Stanley, and a sixteen year old colored boy, Jacob Wainright, whom Stanley had sent to the missionary from Zanzibar. He was with Livingstone when he died, and faithfully stayed with his body.

Stanley wrote in his journal: "Dear Livingstone! another sacrifice to Africa. His mission, however, must not be allowed to cease. Others must go forward and fill the gap. . . . May I be selected to succeed him in opening up Africa to the shining light of Christianity!"

The London *Daily Telegraph* and the *New York Herald* agreed to send Stanley on his new mission through the Dark Continent. With three hundred and fifty-six chosen men, three of them white who died on the way, and large amounts of cloth, beads and food, eight tons in all, they left Zanzibar, November 11, 1874, taking somewhat the same route as before.

On March 8 a portion of the company set sail on Lake Victoria Nyanza in a cedar boat forty feet long, which Stanley had brought in sections from England. At Uganda they met the Emperor Mtesa who governed three million people. Mtesa wished to learn of the Christian

religion, and Stanley told him the story of Christ. Mtesa asked for pastors and teachers to be sent to him, and soon the Christian Missionary Society in England raised \$70,000 for the work, and the Mission was established. Twenty-five years later the people of Uganda had built for themselves three hundred and seventy-two churches with nearly 100,000 communicants.

But many of the people were far different from Mtesa. They came in fury with their canoes and spears ready for battle, and were only subdued by Stanley's explosive bullets which sunk their boats and their occupants. Once when the cannibals pressed close upon him with fifty-four canoes, the men with broad ivory bracelets on their arms and parrot's feathers on their heads, and launched their spears at the strangers, they were cut down by Stanley's rifles, their canoes set adrift, and their huts burned. For nearly three years this heroic march continued, through swamp and wilderness amid wild beasts and savages. When they reached what is now called Stanley Falls, they were twenty-two days in getting past the seven cataracts.

After more than seven thousand miles of travel they arrived at Boma, August 9, 1877. Three days later they gazed upon the Atlantic Ocean. Then Stanley took his devoted remnant by way of the Cape of Good Hope to Zanzibar and restored them to their friends.

From this journey resulted the two volumes "Through the Dark Continent" which has had a very great sale.

Stanley had explored Africa as no other man had done. It must now be opened up to civilization and to stop the dreadful slave trade by the Arabs. He spoke in all the large cities of England, showing the great possibilities for trade, and urging them to build railroads and commercial stations.

As England did not take up the work the Belgians

under King Leopold were anxious to do so, and for five and a half years from January 1879 to June 1884, Stanley gave himself heartily to this great work, described in his book "The Congo, and the Founding of its Free State."

Stanley again visited Africa in 1885 at the request of England to rescue Emin Pasha. The noble General Gordon had been sent to the Soudan the previous year by the British government to assist Egypt in withdrawing her forces that could not hold out longer against the Mahdi. He was killed and his men massacred at Khartoum. Emin, one of the governors, had escaped with his forces to the savage tribes, and wrote despairingly to Europe for help. Stanley with a large force of men started at the Congo, and traveled over six thousand miles through the interior. It was a terrible march. A great number of his men died from starvation and disease. Stanley was often ill from fever. Finally April 18, 1888, Emin was found and his forces rescued.

After this journey Stanley's "In Darkest Africa" was published and translated into French, German, Italian, Spanish and Dutch. In English it has had a sale of over one hundred and fifty thousand copies.

Stanley was now forty-nine, famous the world over. Thousands upon thousands had heard him lecture or had read his books. He had suffered much from illness, but with wonderful will power, courage, energy and great faith in a guiding Providence, he had won fame. Now he was to have the blessing of a happy union and a much-longed-for home.

On July 12, 1890, he was married in Westminster Abbey to Dorothy Tennant, a handsome woman, who had also made a name for herself in art, especially by her pictures of the London street boys.

Cambridge, Oxford, and Edinburgh Universities gave

him honorary degrees. The University of Halle had made him Doctor of Philosophy in 1879. The Geographical Societies of London, Paris, Italy, Sweden, Antwerp and other cities made him an Honorary Member and sent gold medals. The United States Congress passed a unanimous vote of thanks for his great work. He received the much-prized honor of knighthood, in 1899.

In October of that year Stanley, accompanied by his wife, came again to America, and traveled over the States and Canada in a special Pullman car, named the "Henry M. Stanley." His lectures were crowded. Great receptions were given in his honor. I remember meeting him at an elegant home in New York City, a man of few words, self-possessed, with fine head and quiet dignity. While on this visit in America he took his wife to New Orleans and walked down the street where over thirty years before, homeless and hungry, he had slept in the shadow of the cotton bales!

In 1895, Stanley was elected to Parliament for North Lambeth. He seemed not to care for the honor, and did not find much pleasure in the work, but his wife was gratified, especially as she feared he might return to Africa, even though he had been, as he said, "racked by over three hundred fevers." After five years Stanley was glad to retire.

After living in London for eight years and longing for the open air, he purchased, in 1898, Furze Hill, in Surrey, about thirty miles from London, a large and beautiful estate. Here he was very happy. He enlarged the rooms, built new walks and bridges, planned a small farm, and made it an ideal home.

In April, 1903, his left side became paralyzed. For nearly a year he lay helpless as a child, patient and courageous. In the late autumn he was able to walk a few

steps, but on the anniversary of his first attack he was stricken with pleurisy, and the end came soon.

On the night of May, 9, his mind wandered and he said "I have done—all—my work. . . . Oh! I want to be free! I want to go—into the woods—to be free!" Towards morning, moving his hand upon that of his wife, and looking up into her face, he said, "I want—I want—to go home!" Then came the end.

His body was carried to Westminster Abbey, and after the funeral service was read he was buried in the village churchyard near his home.

THOMAS ALVA EDISON

IN the quiet little town of Milan, Ohio, Thomas A. Edison was born February 11, 1847. His father, Samuel, was of Dutch ancestry, the family coming to America from Amsterdam in 1737. His mother, Nancy Elliot, was a Canadian of Scotch descent.

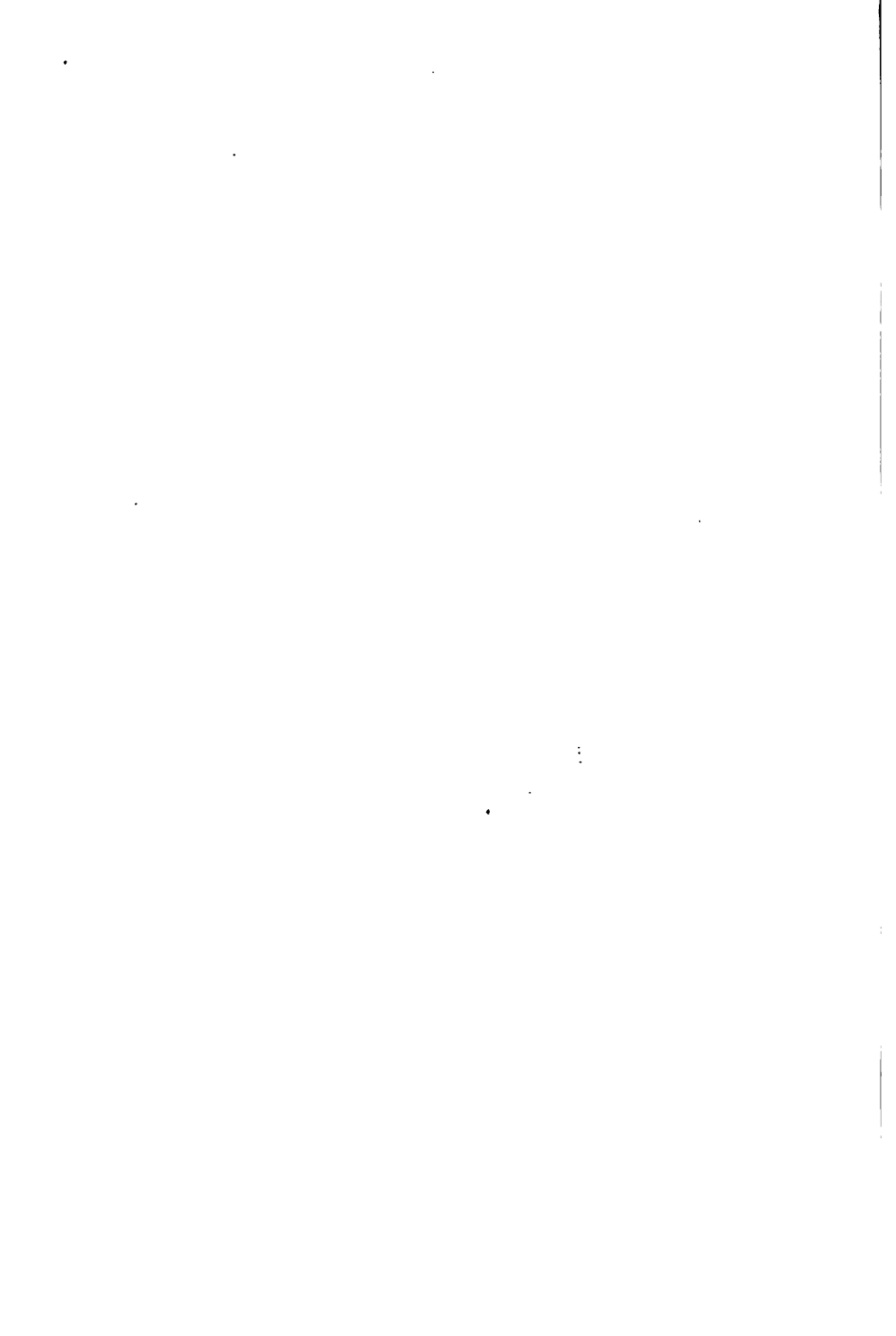
The child early showed great fondness for reading, which was encouraged by his mother, who had been a school-teacher. Like other active-brained children he was always inquiring "how" a thing was accomplished. The neighbors tell the story of his desire to know how a goose became the proud mother of goslings. When he was six years old, his parents missing him, found him in the barn sitting on a nest of goose eggs, his dress skirt spread over the eggs to keep them warm. He had placed food for himself nearby, so that the experiment might be carried on as long as necessary. The plan was broken up by his amazed parents.

When the boy was seven, the family moved to Port Huron, Michigan. Here he was placed at school, but remained only three months. Edison said years later, "I remember I used never to be able to get along at school. I don't know now what it was, but I was always at the foot of the class. I used to feel that the teachers never sympathized with me and that my father thought I was stupid. My mother was always kind, always sympathetic, and she never misunderstood or misjudged me. But I was afraid to tell her all my difficulties at school, for fear she too might lose her confidence in me.



From stereograph, copyright 1905, by Underwood & Underwood

THOMAS ALVA EDISON IN HIS LABORATORY



"One day I overheard the teacher tell the inspector that I was 'addled' and it would not be worth while keeping me in school any longer. I was so hurt by this last straw that I burst out crying and went home and told my mother about it. Then I found out what a good thing a good mother was. She came out as my strong defender. . . . My mother was the making of me. She was so true, so sure of me; and I felt that I had some one to live for, some one I must not disappoint. . . . I did not have my mother very long, but in that length of time she cast over me an influence which has lasted all my life. The good effect of her early training I can never lose. If it had not been for her appreciation and her faith in me at a critical time in my experience, I should very likely never have become an inventor."

The days at school were thus ended, but the reading with his mother went on. Between nine and twelve years of age he was reading Hume's "History of England," "The Penny Encyclopedia," Gibbon's "Decline and Fall of the Roman Empire," Ure's "Dictionary of the Sciences," and Newton's "Principia." The last book he did not well understand, and he says, "It gave me a distaste for mathematics from which I have never recovered."

But reading did not bring in money, and it was necessary for him to earn. He applied for the position of train boy on the Grand Trunk Railroad running between Port Huron and Detroit, and before the place was obtained sold papers on the street.

His pleasant manner won him friends on the train, as he sold his books, papers, toys, packages of prize candy, and peanuts. His mother had constant fear of accidents, but encouraged and cheered him in his work.

"His mother kept him supplied with clean shirts," says a friend, "and he always washed his face and hands,

but I think in those days he did not often comb his hair. He would buy a cheap suit of clothes and wear them until they were worn out, when he would buy another. He never by any chance blacked his boots."

It was in the early days of the Civil War and newspapers sold well. He conceived the idea of having a paper of his own, and buying some old type from the *Detroit Free Press* and a printing press formerly used to print bills of fare at a hotel, the boy printed his *Weekly Herald* on the train, the first copy appearing February 3, 1862. It was such a novelty and so original, twelve inches by sixteen in size, that it soon had five hundred regular subscribers at eight cents a month, and two hundred copies were sold on the train at three cents each. Young Edison made forty-five dollars a month from this venture. In four years he had earned two thousand dollars, giving it all to his parents.

In one comparatively unused car of the train, the lad had been allowed, besides his printing-press, to have a "laboratory" consisting of telegraph apparatus, bottles of chemicals, and other things dear to a young experimenter's heart.

As the car was passing over a rough road a bottle of phosphorus fell to the floor and set the woodwork on fire. The conductor, a Scotchman, incensed at the danger to his passengers, at the first station, Mt. Clemens, threw the youth onto the platform, and his printing-press, type, and the complete contents of the laboratory after him. The worst thing of all was that the boxing of the boy's ears by the irate conductor produced permanent deafness in his right ear, from which the great inventor has been inconvenienced all his life. No surgical skill has been able to improve the case.

Saddened of course, but not discouraged, Edison's

father gave him a room for his experiments near the roof, in their house, and the enthusiastic work went on. Telegraph lines were constructed between his home and those of other boys, by an ordinary stovepipe wire, insulated by necks of bottles, the wires strung from tree to tree.

One night a neighbor's cow wandered through the orchard, knocked down the telegraph poles, became entangled in the wires and alarmed the people by her bellowing. This ended the "home" telegraph.

The *Weekly Herald* was discontinued in favor of another paper called *Paul Pry*, at the request of a young friend, but it came to an inglorious end, as the "personals" so annoyed one man, that, meeting Edison, he threw him into the St. Clair River, allowing him to swim out as best he could. This ended the editorial enterprise.

In 1862, when Edison was fifteen years old, at the Mt. Clemens station, where he had once been thrown off by the angry conductor, he saved the life of a child, and was greatly helped in consequence of the brave act.

Jimmy, the son of Mr. J. U. Mackenzie, the station agent, a baby of two and a half years, unperceived had run upon the track before an approaching train. In a moment Edison sprang for the child and both were thrown upon the gravel ballast with such force as to cut the flesh, the wheel of the car striking the heel of Edison's shoe. But the baby was saved!

The grateful father, eager to help the boy who had risked his life, offered to teach him four days each week, after his work on the train, how to become a telegraph operator. In three months Mackenzie says "he could teach me, and on my suggestion applied for a position as night operator at Port Huron Station." He obtained it, receiving a salary of twenty-five dollars a month.

Eager to experiment in the daytime, he could not always keep awake at night, and finally lost his position.

From Port Huron, Edison went to Sarnia, and here his experimenting got him into trouble. He allowed a train to pass by his station, while another train was just ahead. Realizing what would happen, he rushed down the track, but the engine drivers fortunately heard each other's whistles and so prevented a rear-end collision.

In November, 1864, Edison, a little over seventeen, began telegraph work in Indianapolis, receiving about seventy-five dollars a month. But wherever he worked he was always low in funds, for he sent home all he could possibly spare, and spent the remainder for second-hand books and material to experiment with.

In Detroit, when a train-boy, he had begun to read the Public Library quite through, but after reading about "fifteen feet" of books, the task seemed too great for even an indefatigable lad.

In Cincinnati where he worked when he was eighteen, he bought at an auction room a very large pile of "North American Reviews" for two dollars. Taking them home at three o'clock in the morning, he was thought to be a thief by a policeman who commanded him to "halt." The deaf boy did not hear him, and a bullet soon whizzed by his ear, just missing him. "If I'd been a better shot you might have got killed," said the officer.

From Cincinnati Edison went to Memphis, and from there to Louisville. With almost no money in his pocket—he was always giving to "tramp operators"—he walked one hundred miles of the journey, and obtained free transportation the rest of the way. He was very poorly dressed, and his few possessions were tied in a handkerchief over his shoulder. His quick work, for

he was at one time the fastest operator in the employ of the Western Union, soon obtained a situation for him.

As usual his "inquiring mind" got him into difficulty. "I went one night," says Edison, "into the battery room to obtain some sulphuric acid for experimenting. The acid in the carboy tipped over, ate up the floor, and went through to the manager's room below, ate up his desk and all the carpet. The next morning I was summoned before the board and told that what they wanted was telegraph operators, not experimenters, so that I was at liberty to take pay and leave."

Edison, with health somewhat impaired, returned to his Port Huron home for eighteen months. He was at this time twenty-one. Matters had gone better financially with his parents. A free pass was now given him to Boston by the Grand Trunk Railway Company. They had adopted one of his inventive schemes, "an ingenious device by which a single submarine cable could be utilized for two circuits."

Once in Boston, the operatives were highly amused at his poor clothes and unkempt appearance, but their views soon changed when they saw his skillful work.

Edison soon opened a small workshop for his experiments with electricity. "One day," says his friend, Milton Adams, "he bought the whole of Faraday's works on electricity, brought them home at three o'clock a. m. and read assiduously until I rose, when we made for Hanover street (a mile away) to secure breakfast. Tom's brain was on fire with what he had read, and he suddenly remarked to me: 'Adams, I've got so much to do, and life is so short, that I am going to hustle.' And with that he started on a dead run for his breakfast."

He worked nights in the Western Union Telegraph Company's office, and spent his days in the Public Library, in second-hand book shops, and in his laboratory.

He took out his first patent in 1869 for an electrical vote-recording machine, but the Massachusetts Legislature, to his great disappointment, did not adopt it.

Invited to speak on telegraphy before an academy, Edison forgot the appointment, and when summoned by his friend Adams, was found on the top of a house putting up telegraph wires. Appearing in their working clothes, Adams and he were astonished to find an audience not of boys, as they had expected, but of beautifully dressed young ladies!

Edison, two or three hundred dollars in debt, his mind full of inventive plans that he could not carry out for lack of money, and tired of being an operator, went to New York in 1869. For three weeks he had none too much food, and even less encouragement.

Finally, one morning, he entered the Law's Gold Reporting Company's office, on Wall Street. The stock quotation printer in the central office had suddenly collapsed, with five or six hundred brokerage offices in distress. Edison said, "I think, Mr. Law, I can show you where the trouble lies."

He did so, and was soon offered a position as manager of the service at three hundred dollars a month.

After a time he connected himself with General Marshall Lefferts, then President of the Gold and Stock Telegraph Company. He invented several stock printers, and private printing telegraphic appliances and was asked what he would take for these inventions. He said, "I do not know what they are worth. Make me an offer."

The reply was, "How would forty thousand dollars strike you?"

Edison says, "I believe I could have been knocked down with the traditional feather, so astonished was I at the sum."

The "addled" schoolboy of Port Huron was on the high road to fame and fortune. His mother's faith in him had not been misplaced.

With this forty thousand dollars he at once opened a factory at Newark, New Jersey, with a force of three hundred men.

After leaving Boston in 1869, Edison invented his duplex system of telegraphing by which two messages can be sent in opposite directions over the same wire at the same time. This he sold to the Western Union, and in 1874 invented his quadruplex system, by which four messages can be sent over a single line, two in each direction. For this the Western Union paid him thirty thousand dollars, the whole of which he used in trying to invent a wire to carry six messages. To the Western Union it has been the saving of many millions of dollars.

Edison also perfected his automatic telegraph system which the papers of the time, 1873, spoke of as "simply incredible."

His friend and associate, Charles Bachelor, tells how untiringly Edison worked. "I came in one night," he says, "and there sat Edison with a pile of chemistries and chemical books that were five feet high when they stood on the floor and lay one upon the other. He had ordered them from New York, London and Paris. He studied them night and day. He ate at his desk and slept in his chair. In six weeks he had gone through the books, written a volume of abstracts, made two thousand experiments on the formulas, and had produced a solution (the only one in the world) which would do the very thing he wanted done—record over two hundred words a minute on a wire 250 miles long. He ultimately succeeded in recording 3,100 words a minute."

In the midst of this absorbing work, Edison, whose mother was dead, turned to another for appreciation and

affection. He married in 1873, when he was twenty-six, Mary E. Stillwell, an intelligent and sweet-tempered girl of Newark, one of his working force and much beloved by them all. She proved an admirable wife, and mother to their three children, Mary Estelle, Thomas Alva Edison, Jr., affectionately nicknamed "Dot" and "Dash," and William Leslie.

Mrs. Edison lived only eight years after her marriage, dying in 1881, but she lived long enough to see her husband recognized as one of the remarkable men of America.

Edison had removed in 1876 to Menlo Park, on the New York and Philadelphia Railroad, twenty-four miles from New York, where he built a workshop one hundred feet long by thirty-five feet, an extensive laboratory, and a costly scientific library. Here he hoped to work and think in quiet, which, however, proved an impossibility.

For years scientists had been talking of the possibility of using electricity to convey speech through great distances. On the same day, February 15, 1876, two men, Alexander Graham Bell, born in Edinburgh, Scotland, in 1847, and Elisha Gray, born in Barnesville, Ohio, in 1835, applied for patents in Washington covering inventions for "transmitting vocal sounds telegraphically." It was decided that Bell of Massachusetts was a few hours earlier than Gray of Chicago in his application, and he was given a patent March 7.

The public had little faith at first in the telephone, and thought it a pretty toy. Francis Arthur Jones in his very interesting life of Edison says: "Bell had a strenuous time trying to get people interested in his enterprise. He offered a friend a half interest in his invention for \$2,500, but in spite of his assurance that the telephone would subsequently do away with the telegraph, the friend declined. To an official in the Patent Office

Bell offered a tenth interest for \$100 which was also refused. In fifteen years that tenth was worth \$1,500,000."

At this time Edison devised a carbon transmitter "which," says the *Scientific American* for April, 1909, "is universally acknowledged to have been the needed device that gave to the telephone the element of practicability that made it a commercial possibility."

W. K. L. Dickson in his life of Edison quotes the inventor: "Bell's instrument was taken up by Boston capitalists while mine was adopted by the Western Union, and a fierce competition ensued. It was seen by the Bell people that their instrument was impracticable for commercial purposes without my transmitter, and *pro contra* by the Western Union that without Bell's receiver, which they did not own, my instrument was not available without extensive litigation, so a consolidation of interests took place."

Electric lighting had long been made a study by great scientists. "In 1878," says Edison, "I went down to see Professor Barker, at Philadelphia, and he showed me an arc lamp—the first I had seen. Then a little later I saw another—I think it was one of Brush's make. . . . It was easy to see what the thing needed. It wanted to be subdivided. The light was too bright and too big. What we wished for was little lights, and a distribution of them to people's houses in a manner similar to gas."

And then began thirteen months of tireless labor by Edison in experimenting. It is said that over two thousand substances were tried to find the right filament for the vacuum in his glass globes. Fine platinum wire would melt; carbonized cotton thread would break. "We saw that carbon was what we wanted," says Edison, "and the next question was, what kind of carbon. I began to try various things, and finally I carbonized a

strip of bamboo from a Japanese fan, and saw that I was on the right track. But we had a rare hunt finding the real thing."

One of his men went twenty-three hundred miles up the Amazon River, another traveled thirty thousand miles in India and China, and another through Japan, where the proper fibre was obtained. About one hundred thousand dollars were spent in this search for bamboo.

In January, 1880, Edison obtained a patent for his electric lamp. Then a lamp factory was started at Menlo Park and a central station was built in New York, from which consumers could obtain their light as they did gas. Edison superintended it all, sleeping at night on piles of pipes in the station. There was no end of obstacles. Scientists said it would not work, but when it did work, litigation began, and Edison fought for his lamp fourteen years and finally won his rights.

Edison had already invented his phonograph or "talking machine," his first patent being obtained February 19, 1878. He says, "I discovered the principle by the merest accident. I was singing to the mouth-piece of a telephone, when the vibrations of the voice sent the fine steel point into my finger. That set me to thinking. If I could record the actions of the point and send the point over the same surface afterward, I saw no reason why the thing would not talk. I tried the experiment first on a strip of telegraph paper, and found that the point made an alphabet. I shouted the words 'hello! hello!' into the mouth-piece, ran the paper back over the steel point, and heard a faint 'hello! hello!' in return. I determined to make a machine that would work accurately, and gave my assistants instructions, telling them what I had discovered. They laughed at me."

But as soon as the first crude machine was tested, the phonograph was an assured success. It only required

the refinements of later models to make it the marvelous instrument it is to-day. Never has an invention aroused more general interest. The phonograph of the present has given rise to varied industries runing into millions of dollars.

Soon after its invention Mr. Edison himself wrote an article for the *North American Review* naming some of the uses which he conceived for the phonograph. He saw in it perfection for the telephone and the telegraph; it could be used in the court room for taking down the testimony of witnesses and recording the judge's counsel—in short, for keeping a full record of all law cases in such a fashion that they could be produced in their entirety at any time—an item of no little value on occasion. The phonograph would be invaluable in asylums and hospitals for the entertainment of the sick and the blind, and as an elocution or language teacher; public speakers could by its use reach unlimited audiences; and lastly, and by no means least, it would be of great service in offices, saving the time of the employer and doing away with a stenographer altogether.

His next great invention was even more epoch-making—it was the kinetoscope, the parent of our modern motion pictures. He was not the very first experimenter in this field, but he brought to the problem a highly trained mind and resourceful laboratory. "Surely," said he, "it ought to be possible to do for the eye what has been done for the ear." He realized that to indicate natural movements successfully pictures would have to be taken with great rapidity, say from forty to sixty a second. By this means alone would the eye be prevented from detecting the change. And the pictures once secured, some sort of a machine would be necessary for their portrayal: altogether the invention promised to be most interesting. But it involved a realm of science to

which the Wizard was a stranger—photography. He had never taken a snapshot or developed a plate, and had, in fact, hardly seen a camera. This, however, was no barrier: the inventor was used to delving for whatever was needed. He plunged forthwith into the study of photography, and shortly had mastered all that was to be known concerning the essential details.

“We shall never get anywhere with cumbersome glass plates, and a multiple of cameras,” he said. “We must have films, capable of taking one impression after another with great rapidity.”

But when he looked about him for film material, lo! there was none. Immediately a photographic laboratory was added to his establishment, and a train of experiments set in motion to produce what he wanted. Eventually a film was evolved which suited his purpose, and the machine for the portrayal of the pictures, the kinoscope, too was forthcoming. Now began the taking of miles and miles of films for demonstration. The boys in the laboratory turned somersaults, stood on their heads, played leap-frog, and posed in all sorts of stunts for the film camera. Later, when the machine came nearer being the perfected thing it is to-day, a stage was put up in the Orange laboratory and various celebrities came down from New York. All this, of course, cost a good deal, and it is said that this invention gobbled up at least a hundred thousand dollars before it could be considered a commercial success.

Not content with this, Edison turned his attention to the talking-motion-picture, a combination of phonograph and kinoscope, and while interesting public demonstrations were given showing that this was possible, minor difficulties have prevented it thus far, from being a commercial success. “I believe in coming years,” said Edison, “that grand opera can be given without any

material change from the original, and with artists and musicians long since dead."

Edison invented many other things besides those already mentioned, among them the tasimeter by which the heat of the stars can be measured; the megaphone for conveying sound to distant points; the aerophone by which the voice is magnified two hundred times; and the mimeograph for making copies of documents. He made a magnetic ore separator, the iron being separated from low-grade ores by an electro-magnet. He also secured twenty patents on his storage battery. Edison said in 1906, "I believe that the problem of vehicular traffic in cities has at last been solved. The new electric storage cell weighs forty pounds per horse-power hour. . . . I believe that the solution of vehicular traffic in cities is to be found in the electric wagon. Leaving off the horse reduces the length of the vehicle one-half. Electric power will double the speed. With the new electric wagon, the vehicular traffic of cities can be increased four times without producing any more congestion than at present."

His experiments with building cement houses aroused wide attention. A steel mould for the proposed structure is made, and the cement poured into this. After the latter hardens, the mould is removed for use elsewhere; and the complete structure except for trim and finish is ready in a few days.

In 1886, Edison moved from Menlo Park to a great laboratory and factory built at the foot of the Orange mountains in Orange, New Jersey.

Here are models of his various inventions, and his chemical laboratory where he often spends days and nights, seemingly forgetting to eat or sleep. Once he worked for sixty hours, and then slept nearly thirty to recuperate. Like Napoleon, he seemed able to sleep any-

where, at almost any time, for a brief period, and was thus rested.

In this year, 1886, five years after the death of his first wife, Edison married Miss Mina Miller, the young and very attractive daughter of Lewis Miller of Akron, Ohio, a wealthy manufacturer and one of the founders of "Chautauqua." Soon after, Edison bought "Glenmont" at Llewellyn Park, near his laboratory. It is an elegant and beautiful house of brick and wood in Queen Anne style, set in the midst of thirteen acres of park and garden, with conservatories. Into this happy home came three more children, Madelyn, Charles, and Theodore. At "Glenmont" are gifts from all the world; statues of serpentine marble from the Russian Emperor; Japanese vases from the Society of Engineers in Japan; a Krupp inkstand from the great gun maker of Germany composed of miniature guns and shells. Here is the Prince Albert Gold Medal from the London Society of Arts given in 1892; the three degrees of the Legion of Honor; the bronze medal of the Photographic Society of France; the Order of Commander of the Crown of Italy; medals from the American Institutes of Boston and New York; and from the great Expositions in Australia, Austria, England, France, and America.

Always thorough and painstaking himself, Edison never had any patience with workers who were forgetful or had only a smattering of knowledge. He prepared a list of questions which he sprung on unwary applicants for positions, and usually with disastrous results. This questionnaire finally got into print, in 1921, and created a furore. Educators and journalists denounced it as an unfair test, although the questions as a whole looked innocent enough—ranging generally from the location of some town or river to the chief products of a given country or the facts about some famous man. Finally

Edison came to the defence of his test by saying that he had adopted it to get around him men with accurate and acute memories. He said that the inability to remember on the part of some assistant had cost him as much as \$5,000. for a single lapse. "Of course I don't care directly," he said, "whether a man knows the capital of Nevada, or the source of mahogany, or the location of Timbuctoo. Of course I don't care whether he knows who Desmoulins and Pascal and Kit Carson were. But if he ever knew any of these things and doesn't know them now, I do very much care about that in connection with giving him a job. For the assumption is that, if he has forgotten these things, he will forget something else that has direct bearing on his job."

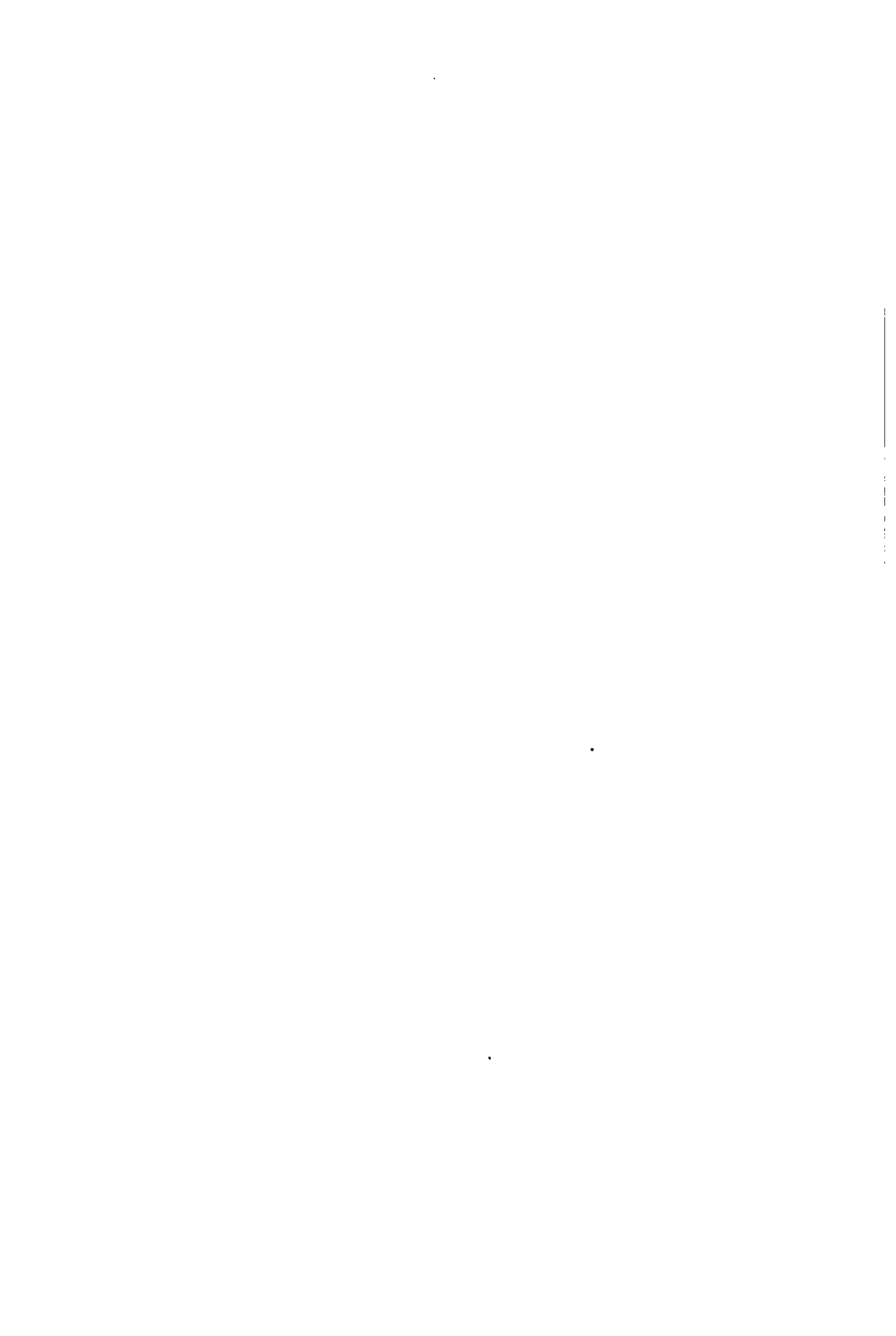
His tests indicated, according to Mr. Edison, that what the candidates learned in school and college through set teaching does not survive in their minds, and that the facts picked up in ordinary book and newspaper reading stick fastest.

"Of the first 718 men who attempted my questionnaire," he said, "only fifty-seven could be given the grade of seventy, which, after being revised to a practical forty means nothing but 'fair.' Only thirty-two attained a mark approaching ninety, enabling me to see where they had done four-fifths of what was set before them to do, and earning a grade of A."

In spite of wealth and success, Edison never lost his love for his work. Early and late he might be found in shop or laboratory and when his birthday came around, it was always difficult to get him to "knock off" more than long enough to eat lunch. He lived up to his motto: "Genius is two percent inspiration and ninety-eight percent perspiration." And he proved constantly in his own life that it was "the infinite capacity of taking pains."









CONSERVED
02-203
A12
HARVARD COLLEGE
LIBRARY

